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EVALUATION OF THE IMPACT OF TITLE I OF THE ELEMENTARY AND SECONDARY EDUCATION ACT IN THE CINCINNATI PUBLIC SCHOOLS.
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THE EFFECT WHICH THE FIRST YEAR OF VARIOUS ELEMENTARY AND SECONDARY EDUCATION ACT (ESEA) TITLE I COMPENSATORY EDUCATION PROJECTS HAS HAD ON A DISADVANTAGED POPULATION IN CINCINNATI IS REPORTED IN THIS EVALUATION. THE EVALUATORS HYPOTHESIZED THAT THE MOST DRAMATIC RESULTS WOULD OCCUR IN SCHOOLS WHICH RECEIVED THE MOST INTENSIVE TREATMENT. IN THE EVALUATION ONLY VARIABLES WHICH ARE EMPIRICALLY OBSERVABLE WERE STUDIED. HOWEVER, A STRICT EXPERIMENTAL DESIGN WAS IMPOSSIBLE BECAUSE SUCH A DESIGN WOULD HAVE MEANT LEAVING STUDENTS OUT OF THE PROJECT SO THAT THEY COULD PARTICIPATE IN CONTROL GROUPS. NEVERTHELESS, GENERALIZATIONS MADE FROM THE FINDINGS REVEAL THAT THE PROJECTS ARE "PROBABLY" HAVING AN IMPACT ON THE CINCINNATI SCHOOL SYSTEM. PART I OF THE REPORT EVALUATES THE COMBINED RESULTS OF THE 13 PROJECTS AND THEIR COMPONENT SERVICES ACCORDING TO--(1) THE RESULTS OF TEACHER, STUDENT, AND PARENT SURVEYS, (2) IMPROVED PUPIL ACADEMIC ACHIEVEMENT, (3) CHANGES IN PUPIL SELF-IMAGE, (4) PROMOTION RATES, (5) PUPIL ATTENDANCE RATES, AND (6) NUMBERS OF DROPOUTS. PART II DESCRIBES AND EVALUATES EACH PROJECT INDIVIDUALLY, INCLUDING AMONG OTHERS, CHILDHOOD EDUCATION, SATURDAY ENRICHMENT CLASSES, AND EDUCATION RESOURCES CENTERS PROJECTS. SUBSTANTIVE DATA IS REPORTED IN 36 TABLES THROUGHOUT THE REPORT. (LB)

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THE FIRST YEAR OF TITLE 1

Elementary and Secondary Education Act of 1965

EVALUATION OF THE IMPACT OF TITLE I OF THE ELEMENTARY AND SECONDARY EDUCATION ACT IN THE CINCINNATI PUBLIC SCHOOLS

DEPARTMENT OF INSTRUCTION
Cincinnati Public Schools

PREFACE

This report has as its purpose the evaluation of the three million dollar Education Act program conducted in the Cincinnati Public Schools in the latter part of the 1965-66 school year. Emerging from this evaluation is clear evidence of success in applying this federal expenditure to the end for which it was intended: improving the educational services offered to children in disadvantaged areas. An examination of the findings reported here will leave little doubt that the constant, diligent effort invested in the program may bring results that more than justify the program's continuation.

Indeed, these activities are underway for the current 1966-67 school year. In the day-to-day operation of the program, those involved will benefit from an alertness to the possibilities for improving or refining the services offered. It is toward this end that this evaluation report is directed.

The evaluation of the Education Act program, including the writing of this report, is the responsibility of the Division of Program Development, James N. Jacobs, Director, and Joseph Felix, Associate. The job could not have been completed without the extensive help given by the ESEA project staff, Lawrence Hawkins, Director; the Division of Evaluation Services, Joan Bollenbacher, Director; the Division of Psychological Services, Charles Miller, Director; and the Division of Data Processing, Edward Ebel, Director. Special recognition must be given to the following persons from these divisions: Albert Rouse, Suzanne Hetzel, Marlene Beigel, Ruth Snyder, Elizabeth Battersby, Ann Rasche, Ronald J. Ausdenmoore, John C. Bennett, James N. Peay, and Walter Reece.

This report is a condensation of three separate issues of the Journal of Instructional Research and Program Development--Volume 2, Numbers 1, 2, and 3, published by the Cincinnati Public Schools. These issues of the Journal are available in limited numbers for those who wish to read the unabridged versions of the evaluation studies. Requests should be directed to the Division of Program Development. We would welcome any comments or constructive criticism of the content, procedures or strategies applied herein.

Robert P. Curry
Associate Superintendent,
Department of Instruction

NOTE: Throughout this report, the phrase "the Education Act" refers specifically to Title I of the Elementary and Secondary Education Act of 1965.

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EVALUATION OF THE IMPACT OF THE ELEMENTARY AND SECONDARY EDUCATION ACT IN THE CINCINNATI PUBLIC SCHOOLS

INTRODUCTION

Background

The passage of the Elementary and Secondary Education Act of 1965 resulted in an allotment of over three million dollars to the Cincinnati Public Schools to enhance the education of disadvantaged children. Thirteen projects were designed to respond to the various needs of disadvantaged children from pre-school through high school. These projects, which were accepted and implemented in fiscal 1966, are described in detail in the Journal of Instructional Research and Program Development, Volume 1, Numbers 3 and 4, 1966, Cincinnati Public Schools.*

Since the projects were all approved in the first five months of 1966, their duration has probably been too brief to expect measurable advantageous results. In the first place, each project had to be superimposed on an existing instructional program, and achieving efficient operation was thus made a more complex task. New staff positions are still undergoing changes in definition of role and of relationship with pupils. Administrative details are being ironed out, and certain overlapping functions are being identified and eliminated. Secondly, those services that had direct impact on individual pupils did so for a very brief time. Some of the objectives that have been identified for projects are so complex in nature that it is realistic to expect changes to occur only after a period of years. Those who look for measurable results during these first few months of operation will be disappointed.

And yet, early and continuous evaluation of the Education Act program is a necessity. Not only is it required by the law itself, but it is also a matter of great concern to educators. Only through such evaluation can optimal use of available funds be assured. Further, should these funds be reduced, educators must be able to determine which services have been most effective.

Generalizations

In the process of evaluating the Education Act program for the current year, several gross generalizations may be made:

1. Our school system has benefited greatly from the process of diagnosis that is inherent in evaluation. We are becoming more sensitive and sophisticated in identifying needs and measuring educational outcomes of school children.

2. We are becoming more aware of the need for better instrumentation to measure important educational objectives.

3. The process of disseminating important findings needs to be studied and strengthened.

4. We must attain a flexible posture so that changes can be made when the evidence indicates that such changes are desirable. We must remain sufficiently "experimental" so that no practice becomes immutable.

5. Education Act projects and their component services, evaluation and dissemination procedures, probably are having an impact on the school system as a whole.

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*Limited copies of the Journal are available upon request from the Division of Program Development, Department of Instruction, Cincinnati Public Schools.

6. There is a great need for the development of evaluation strategies. Experimental designs are often inappropriate and impossible to apply to educational projects. Rational validity and internal consistency will have to replace empirical types of validity.

7. There is a need to keep an accurate account of the precise activities that go into making up each project. It is not uncommon for such a "log" to be the only source of (self-evident) validity for an activity or service.

These facts in no way minimize the importance of evaluating systematically. Each of the thirteen projects has a set of predetermined goals, and although many of these are abstract and difficult to measure, all available evidence must be carefully weighed to determine how well these goals have been met. It is not sufficient simply to believe that a service or treatment is effective.

Program vs. Project Evaluation

Ideally, evaluation should be aimed at determining the precise effect of each service and each project. If this could be done, decisions could be made as to which of several alternative procedures for attaining a specific objective should be used. For example, if increased reading achievement is a desirable goal to attain among disadvantaged children, it is apparent that many procedures can be applied to attain this goal. One could presume that early childhood education might be most effective for increasing reading in later grades. One might reduce class size or provide the services of a remedial reading teacher. One could also approach the problem from the point of view that the classroom teacher needs additional specialized training, or that some amount of time is required for a tutorial program. These are only some of the possibilities for increasing reading achievement. It is apparent that out of the array of possible approaches to this problem we need to know which are most effective and under what conditions they are most effective.

Unfortunately, it is extremely difficult to evaluate the services of the various projects in such a manner. Each service attenuates and interacts with every other service thus making it difficult to identify cause and effect relationships. Tight experimental designs are usually needed to attribute cause and effect relationships; yet such decisions are unrealistic in the sense that some number of pupils must be sacrificed as controls. In addition, it is unrealistic to assume that one cause will produce a given effect since in reality there are many factors which affect such complex variables as achievement.

The measurement of complex variables has been subsumed under program evaluation, i.e., the composite effects of all projects and services. Project evaluation involves less complex variables and/or those more amenable to rational or empirical study as to cause and effect.

The distinction between program and project evaluation lies mainly in the degree to which we can attribute criterion measurements to given causes. Often, the distinction is difficult to make. Program evaluation criteria may be viewed as responding to all project services and their interactions, while project evaluation criteria are judged to be responding mainly to the services and conditions of that particular project.

The overall strategy for program evaluation has been to identify several complex variables which may be viewed as overall barometers of educational health. These variables are assessed under eight headings which constitute program evaluation. These headings are: teacher, student, and parent evaluation, and pupil achievement, self-image, promotion, attendance, and drop-out.

Criterion measurements of these divisions have been obtained in three classifications of schools: primary target (PT), secondary target (ST), and controls (C). Primary target schools are those which have the highest concentrations of disadvantaged children. Further, they are schools in which all of the thirteen projects operate with the greatest intensity. Secondary target schools are those with lesser concentrations of disadvantaged pupils and in which only certain projects operate. Control schools are those which come closest to the target schools in terms of concentration of disadvantaged children. Control schools stand midway between target and non-target schools. The numbers and types of schools in each classification are as follows:

Primary Target	Secondary Target	Controls
13 public elementary	19 public elementary	3 public elementary
3 non-public elementary	11 non-public elementary	2 public secondary
4 public secondary	4 public secondary	

The general hypothesis which permeates program evaluation is that the criterion measurements will respond to the intensity of treatments. Thus, it is expected that primary target schools should show the most desirable change followed by secondary target schools and control schools. In shorthand form this hypothesis is: PT>ST>C.

Two allied difficulties are encountered in interpreting the data collected. First, the control group consists of only five schools. This limited number, with the resulting danger of an atypical population, aggravates the problem inherent in the classification of schools. Although the control schools were chosen for their similarity to target schools, they cannot be assumed to provide a comparable population. In fact, the classifications themselves indicate different types of pupils.

This dissimilarity produces the second difficulty in data interpretation. In order to take into account initial differences in criterion measurements, change scores will have to be used. Since this is the first year of operation for the ESEA program, much of the data presented will be baseline data from which change can be assessed next year.

Finally, it should be emphasized that the ultimate purpose for evaluation is to determine the effects of various services on specific objectives. When criterion measures are obtained from all pupils in all schools, it is apparent that the resulting averages may conceal significant gains that may occur among a smaller group of pupils who received more intensive service both qualitatively and quantitatively. When all pupils within a school receive identical services, this issue is unimportant but such was not the case. The Education Act program for 1966-67 will focus services to an even greater extent on a relatively small number of seriously disadvantaged pupils. Evaluation procedures which focus on specific pupils who receive special treatment within a school will be applied next year as well as the current procedures that focus on changes within a whole school's population.

While Part I reports program evaluation, an evaluation report for each of the thirteen projects is contained in Part II. In Part II, a brief description of each project is followed by evaluation procedures and results. It should be pointed out that in condensing the original reports we have chosen to delete mainly descriptive material rather than substantive data.

PART I

PROGRAM EVALUATION

RESULTS OF TEACHER SURVEY

Rationale

The impact of ESEA in the schools can best be evaluated on the basis of information about those persons most directly affected. Certainly teachers, fundamentally involved in the learning process, are a key source of information. It seems reasonable to assume that their professional training and experience equip them to make valid evaluative ratings regarding Education Act services and concepts. Regardless of the validity of the teachers' judgments, however, their ratings are important as an expression of their feelings about educational concepts and services.

Description of Survey

Teachers in target and control schools were given a survey in which they were to rate various concepts and services on an evaluative scale. This survey was administered in January, 1966 and again in June, 1966. The January survey consisted of 44 items, each representing a concept or service relevant to one or more objectives of the thirteen projects. Teachers were instructed to rate each item from "poor" to "good" on a seven-point semantic differential-type scale. Since the identity of the rater is unimportant, the surveys were kept anonymous to insure more valid responses. Certain respondent characteristics, such as sex, school, and years of experience, were indicated.

Method of Analysis

The primary interest in the survey was in the changes that might occur between January and June. For all practical purposes, the Education Act program did not go into effect until late January and then only for two of the thirteen projects (Early Childhood Education and Physical Health Services). The importance of measuring change is relevant in two ways: the change in the average rating of all survey items; and the particular changes in each survey item.

Through the analysis of variance technique, mean differences in January and June ratings were compared among the three types of schools, both for the survey as a whole and for six rational categories of items. In addition, the significance of differences among various survey items was tested.

Results

Elementary Level Teachers. Table 1 presents the mean ratings for each school classification. Since 1 is the lowest possible rating and 7 is the highest, a rating of 4 is considered a neutral evaluation.

Of greatest significance is a comparison of the average differences in ratings from January to June among school classifications. The mean rating difference in primary target schools was +.12 while the mean rating difference in secondary target schools was -.20 and in control schools -.24. An analysis of variance of the January-June differences showed a significant difference in the overall mean ratings, favoring PT teachers over both ST and C teachers. The difference between the mean ratings of ST and C teachers was not significant.

These results support the general hypothesis that criterion measurements, especially change scores, would be highest for primary target schools. They do

Table 1. **Mean Ratings of Survey Items Made by Elementary Level Teachers in January and June in Primary Target, Secondary Target, and Control Schools.**

SURVEY ITEMS	PRIMARY TARGET SCHOOLS Jan. N=373 (1)	June N=337 (2)	Diff. (2)-(1) (3)	SECONDARY TARGET SCHOOLS Jan. N=501 (4)	June N=495 (5)	Diff. (5)-(4) (6)	CONTROL SCHOOLS Jan. N=55 (7)	June N=65 (8)	Diff. (8)-(7) (9)
1. Adequacy of supplies.	5.05	5.33	+.28	4.77	4.81	+.04	5.69	5.63	-.06
2. Parent involvement.	2.94	3.23	+.29	3.11	2.83	-.28	3.47	3.17	-.30
3. Motivation of my pupils.	4.47	4.45	-.02	4.38	4.06	-.32*	4.74	4.66	-.08
4. Adequacy of school building.	4.26	4.26	0	4.13	4.02	-.11	3.73	3.41	-.32
5. Size of my class(es).	4.56	4.23	-.33*	4.15	3.73	-.42*	3.53	3.73	+.20
6. Pupil-faculty relations.	5.08	4.90	-.18	5.19	4.76	-.43*	5.45	5.20	-.25
7. Books available to my class.	4.81	5.01	+.20	4.75	4.61	-.14	5.02	4.92	-.10
8. Adequacy of school library.	3.42	3.85	+.43*	3.24	3.23	-.01	4.38	3.72	-.66
9. Provision for academic remediation.	3.81	4.40	+.59*	3.92	3.86	-.06	4.04	3.95	-.09
10. Availability of professional reading matter.	4.43	4.80	+.37*	4.30	4.34	+.04	4.54	4.20	-.34
11. Degree of tardiness.	4.19	4.03	-.16	4.26	4.07	-.19	4.69	4.28	-.41
12. School's provision for pupil's health.	4.60	4.96	+.36*	4.99	4.91	-.08	4.98	4.61	-.37
13. Time and place for pupils to study.	3.57	3.54	-.03	3.42	3.19	-.23	4.44	3.75	-.69
14. Overall health level of pupils.	3.82	3.99	+.17	4.15	4.03	-.12	4.62	4.23	-.39
15. Pupil aspiration level.	3.27	3.50	+.23	3.17	3.12	-.05	3.80	3.65	-.15
16. School attendance of pupils.	4.22	4.38	+.16	4.31	4.19	-.12	4.33	4.26	-.07
17. Parent participation in school.	2.74	2.93	+.19	2.84	2.54	-.30*	3.45	3.02	-.43
18. Teacher time to plan.	3.59	3.30	-.29	3.56	2.96	-.60*	3.25	2.97	-.28
19. Teaching in my school.	5.57	5.42	-.15	5.71	5.46	-.25	6.11	5.88	-.23
20. Teacher-Administration cooperation.	5.55	5.32	-.23	5.63	5.30	-.33*	5.51	5.35	-.16
21. Supportive attitude of parents.	3.70	3.71	+.01	3.60	3.28	-.32*	4.17	3.84	-.33
22. Behavior standards of my pupils.	4.17	4.05	-.12	4.01	3.69	-.32*	4.44	3.98	-.46
23. Pupil discipline.	3.97	3.89	-.08	4.09	3.68	-.41*	4.09	3.85	-.24
24. Adequacy of school playground.	3.45	3.51	+.06	3.58	3.38	-.20	3.07	3.09	+.02
25. Provision to challenge able learner.	4.15	4.25	+.10	4.18	3.98	-.20	5.00	5.38	+.38
26. Provision for pupil's cultural growth.	3.85	4.52	+.67*	3.59	3.51	-.08	4.56	4.30	-.26
27. Provision for visiting teacher service.	4.68	4.72	+.04	5.08	4.88	-.20	4.91	4.73	-.18
28. Achievement of pupils.	3.81	4.00	+.19	3.68	3.72	+.04	4.13	4.12	-.01
29. Provision for supervisory personnel.	5.15	5.01	-.14	5.23	4.97	-.26	5.85	5.40	-.45
30. Pupil acquaintance with total community.	3.67	3.87	+.20	3.56	3.60	+.04	4.07	4.02	-.05
31. Adequacy of enrichment activities.	4.18	4.93	+.75*	4.21	4.04	-.18	5.15	5.17	+.02
32. Present curriculum for the disadvantaged.	3.76	4.23	+.47*	3.63	3.48	-.15	3.91	3.38	-.53
33. The type of pupils I teach.	3.28	3.57	+.29	3.24	3.20	-.04	3.82	3.77	-.05
34. Provision for physically-handicapped child.	2.99	3.29	+.30	3.03	2.81	-.22	2.58	2.25	-.33
35. Staff morale.	5.12	4.88	-.24	5.29	4.81	-.48*	5.51	4.97	-.54
36. Provision for emotionally-disturbed child.	2.49	2.51	+.02	2.43	2.53	+.10	2.26	1.81	-.45
37. Time to teach.	4.87	4.65	-.22	4.80	4.39	-.41*	5.36	4.89	-.47
38. Provision for socially-maladjusted child.	2.41	2.51	+.10	2.50	2.47	-.03	2.69	2.12	-.57
39. In-service training.	5.17	4.89	-.28	5.30	4.75	-.55*	5.69	5.52	-.17
40. Previous academic preparation of pupils.	3.33	3.56	+.23	3.69	3.52	-.17	4.17	4.25	+.08
41. Pupil image of self.	3.56	3.43	-.13	3.59	3.26	-.33*	4.47	4.02	-.45
42. Professional cooperation among school staff.	5.43	5.24	-.19	5.72	5.38	-.34*	5.89	5.73	-.16
43. Field trip opportunities.	4.47	5.82	+1.35*	4.19	4.08	-.11	4.55	4.83	+.28
44. School's attempt to reach parents.	5.29	5.36	+.07	5.62	5.38	-.24	5.62	5.09	-.53
GRAND MEAN	4.11	4.23	+.12	4.13	3.93	-.20	4.45	4.21	-.24

*This difference is statistically significant.

NOTE: Four items were added to the June survey: Intelligibility of pupil speech ($\bar{X}$=3.27), Provision for pupil welfare needs ($\bar{X}$=4.84), Help in handling disciplinary problems ($\bar{X}$=4.87), and Adequacy of instructional media ($\bar{X}$=4.85). Because comparative January data is unavailable, these items are omitted from Tables 1 and 3.

not confirm the hypothesis that the secondary target schools would be higher than the control schools. One possible explanation is that the number of projects and the types of services in the secondary target schools may not have been sufficiently great to show a significant difference.

The absolute differences in ratings from January to June should be interpreted cautiously. It is quite possible that teacher ratings vary systematically depending on the time of year in which the ratings are made. The fact that ratings in the control schools decreased an average of .24 would suggest the possibility, at least, that mid-year evaluative ratings are higher than end-of-year ratings even though no identifiable changes have occurred in the school program.

Rough estimates of the significance of change from January to June for each item were made. An average error of variance of 3.27 was used to estimate the significance of difference. Using this error term, the minimum rating difference needed for significance, i.e., not due to chance, for teachers in primary target schools (N=373) is .33. Similarly, the minimum difference in secondary target schools (N-501) is .29 and for control schools (N=55) is .93. Items showing a statistically significant change for January to June are asterisked in Table 1.

To simplify the data shown in Table 1, survey items were grouped into six arbitrarily defined categories* as follows: Staff Morale, Special Provisions for Sub-Groups, Parent Involvement, Teacher Status, School Characteristics, Pupil Characteristics.

The mean differences between January and June shown in Table 1 were grouped and averaged for each category. These results for elementary teachers are shown in Table 2.

Table 2. Mean Rating Differences from January to June of Elementary Teacher Survey Items Classified into Six Rational Categories by Type of School.

Teacher Survey Item Categories	Primary Target	Secondary Target	Controls
Staff Morale	-.20	-.37	-.27
School Characteristics	+.79	-.17	-.26
Pupil Characteristics	+.61	-.18	-.20
Special Provisions	+.47	-.10	-.19
Parent Involvement	+.16	-.30	-.35
Teacher Status	-.11	-.38	-.32

Each of the six categories reflects to some degree the general finding that primary target elementary school teachers rated survey items highest, while secondary target and control school teachers rated items about the same. Some important differences, however, are seen in Table 2. Items dealing with Staff Morale were rated lower in June than in January and about equally so, by the staff in all three types of schools. Staff Morale ratings were high initially and continued high, so this result may be a regression effect. Items dealing with Teacher Status followed a pattern similar to that of Staff Morale, although the differences between primary target and each of the other types of schools are largest for Teacher Status. In each category the mean differences between secondary target and control are approximately the same, thus conforming to the general finding from Table 1 that PT>ST=C.

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*Since this report was written, a factor analysis of the teacher survey was made. In the main, these categories appeared as factors.

Table 3. Mean Ratings of Survey Items Made by Secondary Level Teachers in January and June in Primary Target, Secondary Target, and Control Schools.

SURVEY ITEMS	PRIMARY TARGET SCHOOLS Jan. N=195 (1)	June N=215 (2)	Diff. (2)-(1) (3)	SECONDARY TARGET SCHOOLS Jan. N=223 (4)	June N=198 (5)	Diff. (5)-(4) (6)	CONTROL SCHOOLS Jan. N=39 (7)	June N=63 (8)	Diff. (8)-(7) (9)
1. Adequacy of supplies.	4.82	5.13	+.31	4.92	4.82	-.10	5.46	4.76	-.70
2. Parent involvement.	2.17	2.51	+.34	2.44	2.76	+.32	3.49	2.68	-.81
3. Motivation of my pupils.	3.68	3.85	+.17	3.60	3.21	-.39	4.03	3.13	-.90
4. Adequacy of school building.	4.83	4.48	-.35	4.45	4.51	-.06	5.51	4.43	-1.08*
5. Size of my class(es).	4.16	4.34	+.18	3.93	3.76	-.17	3.49	3.55	+.06
6. Pupil-faculty relations.	4.90	4.99	-.09	4.56	4.41	-.15	4.77	4.05	-.72
7. Books available to my class.	4.77	4.74	-.03	4.85	4.39	-.46*	5.08	4.61	-.47
8. Adequacy of school library.	5.44	4.98	-.46*	5.67	5.53	-.14	5.54	4.51	-1.03*
9. Provision for academic remediation.	3.85	4.23	+.58	4.10	3.58	-.52*	4.34	3.47	-.87
10. Availability of professional reading matter.	4.89	4.97	+.08	5.14	5.16	+.02	5.03	4.54	-.49
11. Degree of tardiness.	2.73	2.96	+.23	3.34	3.21	-.13	4.69	3.32	-1.37*
12. School's provision for pupil's health.	4.96	5.61	+.65*	5.13	4.74	-.39	4.82	4.52	-.30
13. Time and place for pupils to study.	3.80	3.80	0	3.48	3.44	-.04	5.03	3.79	-1.24*
14. Overall health level of pupils.	3.71	4.00	+.29	4.10	3.93	-.17	5.03	4.10	-.93*
15. Pupil aspiration level.	2.88	3.15	+.27	3.01	2.83	-.18	3.46	2.52	-.94*
16. School attendance of pupils.	2.78	3.15	+.37	3.66	3.57	-.09	4.67	3.35	-1.32*
17. Parent participation in school.	1.97	2.00	+.03	2.17	2.20	+.03	3.31	2.14	-1.17*
18. Teacher time to plan.	4.06	4.03	-.03	4.16	3.73	-.43	3.87	3.62	-.25
19. Teaching in my school.	5.34	5.32	-.02	5.40	5.20	-.20	5.82	4.98	-.84
20. Teacher-Administration cooperation.	5.87	5.55	-.32	5.43	5.25	-.18	6.00	5.33	-.67
21. Supportive attitude of parents.	2.95	2.95	0	3.19	3.13	-.06	3.51	2.62	-.89
22. Behavior standards of my pupils.	3.66	3.83	+.17	3.64	3.45	-.19	3.59	2.97	-.62
23. Pupil discipline.	3.82	4.01	+.19	3.29	3.30	+.01	3.56	2.68	-.88
24. Adequacy of school playground.	3.56	3.72	+.16	3.56	3.69	+.13	4.92	4.40	-.52
25. Provision to challenge able learner.	4.14	4.39	+.25	4.30	4.08	-.22	5.36	3.97	-1.39*
26. Provision for pupil's cultural growth.	3.71	4.29	+.58*	3.66	3.64	-.02	4.59	3.83	-.76
27. Provision for visiting teacher service.	4.25	4.59	+.34	4.70	4.41	-.31	4.23	3.92	-.31
28. Achievement of pupils.	3.29	3.67	+.38	3.39	3.36	-.03	3.85	3.44	-.41
29. Provision for supervisory personnel.	4.94	5.19	+.25	5.06	4.60	-.46	5.00	4.60	-.40
30. Pupil acquaintance with total community.	3.41	3.76	+.35	3.52	3.33	-.19	3.59	3.22	-.37
31. Adequacy of enrichment activities.	4.01	4.72	+.71*	4.06	3.76	-.30	4.92	3.92	-1.00*
32. Present curriculum for the disadvantaged.	3.69	4.44	+.75*	3.59	3.30	-.29	5.00	3.89	-1.11*
33. The type of pupils I teach.	3.35	3.49	+.14	3.34	3.23	-.11	3.82	2.98	-.84
34. Provision for physically-handicapped child.	2.85	3.35	+.50*	3.19	2.93	-.26	3.46	2.93	-.53
35. Staff morale.	5.31	5.12	-.19	5.33	4.99	-.34	5.69	4.23	-1.46*
36. Provision for emotionally-disturbed child.	2.44	3.08	+.64*	2.36	2.38	-.08	2.90	2.63	-.27
37. Time to teach.	4.85	4.70	-.15	4.88	4.55	-.33	4.87	4.44	-.43
38. Provision for socially-maladjusted child.	2.46	3.17	+.71*	2.32	2.26	-.06	2.97	2.66	-.31
39. In-service training.	4.82	4.72	-.10	4.87	4.72	-.15	4.79	4.45	-.34
40. Previous academic training of pupils.	3.09	3.13	+.04	3.25	3.06	-.19	3.46	3.22	-.24
41. Pupil image of self.	3.03	3.21	+.18	3.05	2.83	-.22	4.08	3.40	-.68
42. Professional cooperation among school staff.	5.38	5.42	+.04	5.65	5.32	-.33	6.18	5.52	-.66
43. Field trip opportunities.	4.92	5.88	+.96*	4.14	4.25	+.11	5.03	4.52	-.51
44. School's attempt to reach parents.	5.31	5.20	-.11	5.23	5.12	-.11	5.74	4.89	-.89
GRAND MEANS	3.97	4.18	+.21	4.03	3.96	-.17	4.51	3.79	-.72

*This difference is statistically significant.

Perhaps the most significant finding in Table 2 is the fact that the ratings in the primary target schools for School Characteristics (+.79), Pupil Characteristics (+.61), and Special Provisions for Pupil Sub-Groups (+.47) increased significantly. Parent Involvement increased somewhat (+.16) but not as much as the other three categories.

These findings indicate that the categories in which the bulk of services given by the Education Act are the same categories which showed significant improvement--at least in the primary target elementary schools. The Staff Morale and Teacher Status categories, which had only an indirect relationship to Education Act project objectives, showed no significant increase. The reader should be reminded that the decreases in ratings from January to June should not be interpreted as necessarily connected with the Education Act. Since control schools rated lower in June than in January, it is highly tenable that such decreases result from unknown factors relating to time of year.

Secondary Level Teachers. Table 3 presents the mean ratings of secondary school teachers in January and June by item. The overall mean rating difference from January to June in primary target schools is seen to be +.21; in secondary target schools, -.17; and in control schools, -.72. An analysis of variance of these differences revealed them to be statistically significant; thus primary target, secondary school teachers gave higher ratings than secondary target school teachers who in turn gave higher ratings than control school teachers. This finding parallels precisely the general hypothesis that PT>ST>C.

Table 4 summarizes the results of Table 3 in a manner similar to that used for elementary school teachers.

Table 4. Mean Rating Differences from January to June of Secondary Teacher Survey Items Classified into Six Rational Categories by Type of School.

Teacher Survey Item Categories	Primary Target	Secondary Target	Controls
Staff Morale	-.08	-.24	-.87
School Characteristics	+.06	-.17	-.68
Pupil Characteristics	+.24	-.16	-.79
Special Provisions	+.53	-.20	-.72
Parent Involvement	+.12	+.10	-.96
Teacher Status	-.05	-.22	-.38

Each category seems to show the same pattern of PT>ST>C (as far as positive change is concerned) with the exception of parent involvement where PT=ST>C. If one assumes that ratings of the parent involvement category are responding to the parent education project, the latter finding is explainable since this project operated in a similar fashion in both primary and secondary target schools.

It is of interest to note that the decreases in ratings in the two secondary control schools were much larger than those in the four elementary control schools. The reason for this is unclear. It may be simply a function of the selection of control schools; it may be a general phenomenon which distinguishes elementary from secondary schools; or perhaps it is a reaction of the secondary control school staffs of being denied the services of the target schools.

The largest increase in rating by secondary staff was the .53 increase in special provisions for pupil sub-groups and .24 increase for pupil characteristics both in the primary target schools.

Conclusions

Elementary Level Teachers

1. Mean rating difference of all items by elementary teachers showed a significant increase from January to June in primary target schools. Mean ratings in secondary target schools and control schools decreased, each by a similar amount. Thus, the general hypothesis was partially substantiated.

2. Survey items showing significantly higher ratings from January to June in primary target elementary schools were: adequacy of school library; provision for academic remediation; availability of professional reading matter; school's provision for pupil health; adequacy of enrichment activities; present curriculum for the disadvantaged; and field trip opportunities. Only one item, size of my class(es), showed a significant decrease.

3. No survey items showed a significant increase in secondary target or control schools but many showed a significant decrease.

4. In general, the survey items dealing with staff morale were about the same among PT, ST, and C schools, though all systematically decreased. Items dealing with school characteristics, pupil characteristics, and special provisions for pupil sub-groups increased significantly in PT schools and decreased about the same in ST and C. Teacher status items decreased somewhat in PT schools, but decreased much more in ST and C schools. Parent involvement items increased a small amount in PT schools and decreased about the same in ST and C schools.

5. In general, the elementary school teacher ratings reveal that the Education Act program is benefiting pupils in primary target schools but does not support the hypothesis that these benefits apply to pupils in secondary target schools. This is an expected result.

Secondary Level Teachers

6. Mean rating differences of all items by secondary level teachers showed a significant increase from January to June in primary target schools. Ratings in ST schools decreased, and C school ratings decreased even more. This order of school ratings confirms the general hypothesis.

7. Survey items showing significantly higher ratings from January to June in primary target secondary schools were: school's provision for pupil health; provision for pupils' cultural growth; adequacy of enrichment activities; present curriculum for the disadvantaged; provision for physically-handicapped; provision for emotionally disturbed; provision for socially maladjusted; and field trip opportunities. One item, adequacy of school library, showed a significant decrease.

8. No survey item showed a significant increase in ST or C schools but many showed a significant decrease.

9. There was the least amount of relative increase in items dealing with staff morale and teacher status in primary target schools. The largest increases were in special provisions for pupil sub-groups followed by increases in pupil characteristics, parent involvement, and school characteristics. In each category of survey items the trend was: PT>ST>C.

RESULTS OF STUDENT SURVEY

Rationale

The views of students relative to the impact of the Education Act program are important. Rather than students rating projects, however, the approach has been to measure their feelings about school, concerns about school improvement, expressions of parent interest, their self-image and aspiration and a sampling of their behaviors relative to specific project objectives. It is believed that less bias results from this approach than from ratings of specific activities.

Description of Survey

All students in grades four through eleven in target and control schools completed a twenty item questionnaire. They responded anonymously but were asked, however, to indicate the name of their school, their grade level, and sex.

The classroom teacher read directions to the students, who were instructed to answer each item "yes" or "no." As with the teacher and parent survey, pupils in non-public schools were included in the survey. The survey was not administered below grade four simply because most pupils would not have been able to read the questionnaire. Other instruments were developed and administered to primary grade pupils and will be discussed later in this report. Students in 53 schools responded to the survey--a total of 18,394 students, 10,207 in grades four through six and 8,187 in grades seven through eleven.

Since no previous survey of this type has been administered, it is not possible to compare these results with those of similar data collected earlier. It is possible, however, to test the general hypothesis (PT>ST>C) and to test possible response differences between elementary and secondary level pupils.

Methods of Analysis

Student surveys were constructed such that they could be scored by machine. The per cents of affirmative responses were computed by grade level as well as by type of school attended, i.e., PT, ST, or C schools. Chi square analyses were made to test the general hypothesis within both elementary and secondary schools and also to determine whether elementary level pupils differed in comparison with secondary pupils. The results of these analyses are shown in Table 5 in the last three columns.

Results

Table 5 shows the per cent of affirmative responses of pupils classified by level and type of school. The item numbers refer to their order on the questionnaire. For convenience, these items have been grouped in the table around five broad areas mentioned previously.

Pupil Valence Toward School. To change the hearts of pupils toward education is as important an objective of the Education Act as is the changing of mind. This set of items attempted to measure the general feeling of pupils toward school.

When asked "Do you like school?", 80 per cent of all pupils indicated yes. Elementary level pupils "like school" to a greater extent than secondary level pupils although it was noted that tenth and eleventh grade pupils responded more affirmatively than those in the seventh, eighth, and ninth. This may be the result of dissatisfied pupils dropping out of school leaving the more successful pupil to enter grades ten and eleven. At the elementary level, it was found that PT=ST=C

Table 5. Percents* of Affirmative Responses to Student Questionnaire by Type of School and Grade Level, May, 1966.

ITEM	ELEMENTARY SCHOOLS			SECONDARY SCHOOLS			Total All Students	Chi Square Test** by		
	PT	ST	C	PT	ST	C		Level	Type of School Elem.	Sec.
N=	(3307)	(6086)	(814)	(2861)	(4175)	(1151)	(18,394)			
Pupil Valence Toward School										
1. Do you like school?	85%	83%	85%	79%	75%	65%	80%	El>Sec	NSD	P>S>C
3. Would you like to talk to your teacher more?	72	72	69	54	56	47	64	El>Sec	NSD	P=S>C
8. Would you like to spend more time at school?	53	45	39	21	20	11	35	El>Sec	P>S>C	P=S>C
12. Do you like your school?	80	78	82	74	67	64	75	El>Sec	NSD	P>S>C
13. Do you look forward to coming to school?	82	80	72	65	60	43	71	El>Sec	P=S>C	P>S>C
Concerns Relative to School Improvement										
2. Do you need more help from your teacher?	69	67	60	60	62	55	64	El>Sec	P=S>C	P=S>C
9. Are you satisfied with report card grades?	49	50	51	31	33	34	42	El>Sec	NSD	NSD
10. Do you worry about your schoolwork?	78	78	72	75	78	71	77	NSD	NSD	P=S>C
Parent Involvement in Pupil and Pupil's Education										
14. Do you talk about school at home?	79	82	83	75	75	72	78	El>Sec	NSD	NSD
15. Has someone from home ever talked to teacher?	81	79	79	61	65	61	72	El>Sec	NSD	NSD
16. Do you get praise at home for good schoolwork?	82	80	84	67	67	61	74	El>Sec	NSD	NSD
19. Do you talk about future career at home?	86	85	82	85	84	80	85	NSD	NSD	NSD
Self-Image and Aspiration										
11. Are you doing better in schoolwork this year?	75	72	72	56	58	57	66	El>Sec	NSD	NSD
17. Do you think you will graduate from high sch.?	87	86	88	94	93	91	89	Sec>El	NSD	NSD
18. Do you hope to go to college?	90	88	87	71	76	67	82	El>Sec	NSD	S=P>C
Specific Activities which are Project Objectives										
4. Do you read books from a library?	84	84	87	66	68	70	77	El>Sec	NSD	NSD
5. Do you enjoy field trips?	98	95	95	96	93	93	95	NSD	NSD	NSD
6. Do field trips help you in schoolwork?	77	73	73	77	72	70	74	NSD	NSD	P>S=C
7. Do you have a hobby?	76	78	78	75	78	76	77	NSD	NSD	NSD
20. Do you read more than is required by schoolwork?	61	60	55	45	41	43	52	El>Sec	NSD	NSD

*All percents rounded to nearest whole number.
**Chi square test based on number of affirmative responses.

KEY:
El. - Elementary grades 4-6
Sec. - Secondary grades 7-11
PT - Primary target schools
ST - Secondary target schools
C - Control schools
NSD - No significant difference

but for secondary level pupils, PT>ST>C, thus confirming the general hypothesis.

The majority of pupils (64%) felt they would like to talk more with their teachers. This tendency was noted to a greater extent among elementary level than secondary level pupils. In elementary grades PT=ST=C, while in the secondary grades PT=ST>C.

The item "Would you like to spend more time at school?" was answered affirmatively by fewer pupils than any other item on the questionnaire. Elementary pupils were significantly more affirmative to this question than were secondary pupils. At the elementary level PT>ST>C, while for secondary pupils PT=ST>C. It is interesting to note that, while the large majority of pupils like school, they do not wish to spend more time in school.

"Do you like your school?" was responded to in the same manner as "Do you like school?". Elementary pupils like their school more than secondary pupils but within secondary level schools PT>ST>C. The item "Do you look forward to coming to school each morning?" showed precisely the same pattern as the "like school" and "like your school" items.

In general, it would appear that pupils have a rather high valence toward school, even though they do not wish to spend more time at school. There is a definite trend for elementary pupils to have more positive feelings toward school than secondary level pupils. The general hypothesis was confirmed at the secondary level and to a lesser extent at the elementary level.

Concerns Relative to Improvement in School. Pupils who are concerned about doing better in school are presumed to be more highly motivated than those who do not care or are content with their present output.

The item, "Do you need more help from your teacher?" was given an affirmative answer by about two out of three pupils at both the elementary and secondary level. There was a significant difference, however, in response by type of school. For both elementary and secondary pupils, PT=ST>C was indicated.

Only 42 per cent of all pupils indicated they were satisfied with their report card marks. Except for 35 per cent who wanted to spend more time in school, this item showed the least affirmative response. It is quite apparent that elementary pupils are relatively more satisfied with their marks than secondary pupils, but within school level there was no significant difference among pupils in PT, ST, or C schools.

When asked, "Do you worry about your schoolwork?" 77 per cent of all pupils answered *yes*. Elementary and secondary school children answered *yes* in about the same proportion. At the elementary level, PT=ST=C, while at the secondary level, PT=ST>C.

In general, it appears that children sampled are concerned about their schoolwork, and that one may infer a motivation to do better. There is some indication that this concern is more prevalent in target than control schools.

Parent Involvement in Pupil and Pupil's Education. Responses to this set of four items would indicate a rather high degree of parent involvement in their children s education. None of these four items showed any differences between PT, ST, or C schools, while three items (14, 15, 16) showed higher responses by elementary pupils than by secondary pupils. Thus, it would appear that parents of elementary children talk more about school at home, talk more to their child's teacher, and give more praise at home for good schoolwork than do parents of older pupils in secondary grades.

It is difficult to explain why there was no level difference in responses to the question regarding talking with parents about their future job or career. One would expect this topic to be less frequent among younger pupils than among older pupils; yet the results showed a consistently high per cent of all pupils (85%) talking with their parents about their future job. This finding may have implications for curriculum orientation. Perhaps the curriculum should be more job or career oriented at least to the extent of showing the connection between schoolwork and the job future of the pupil.

Self-Image and Aspiration. As a total group, two out of three pupils felt that they are doing better in their schoolwork, although, as has been consistently noted, elementary level pupils are more affirmative in their responses than secondary level pupils. It was believed that this item would show differences among types of schools, but the facts do not bear this out. For both elementary and secondary level pupils PT=ST=C.

When asked, "Do you think you will graduate from high school?" 89 per cent of all pupils answered *yes*, but there were significantly more secondary pupils answering affirmatively than elementary pupils. This latter trend is reversed when pupils were asked "Do you hope to go to college?". For this item it was found that more elementary pupils hope to go to college than secondary pupils. It is seen that approximately the same proportion of elementary pupils think they will graduate from high school and hope to go to college. The large majority (over 90%) of secondary school pupils, however, think they will graduate from high school, while only about 75% hope to go to college. Apparently, the aspiration level of pupils does decrease as they get older. It is difficult to explain why ST>PT>C for secondary level pupils in terms of hoping to go to college. It is the only item in which ST>PT.

Project Objectives. The establishment of elementary school libraries, provision for field trips, and provision for hobby interests are objectives of certain projects. This set of five items sought to determine whether target school pupils were reading more, obtaining satisfaction and learning from field trips and developing hobbies.

It was found that 77 per cent of all sampled pupils read books from the library, but elementary grade pupils do so to a greater extent (about 85%) than secondary grade pupils (about 68%). Only 52 per cent of all pupils read more than is required by their schoolwork, and again elementary pupils do so more than secondary pupils. Within elementary and secondary levels, there were no significant response differences in these two items among PT, ST, and C schools.

The data show that 95 per cent of all pupils enjoy field trips and 74 per cent believe that field trips help in their schoolwork, regardless of grade level. At the secondary level, PT>ST=C concerning whether field trips help in schoolwork, but no significant difference was observed for this item at the elementary level, although PT schools have done much to arrange meaningful trips and help the classroom teacher to relate such experiences to the instructional program.

About three out of four pupils at both elementary and secondary level indicated they had hobbies. No significant difference was noted among PT, ST, and C in spite of the fact that the after-school program in target schools does attempt to encourage hobbies.

Conclusions

1. Of the 40 chi square tests of the general hypothesis, 20 at the elementary and 20 at the secondary level, 12 were significant. The general finding was confirmation of the hypothesis at least to the extent that PT and ST>C. From this it is inferred that the program has met some of its broad objectives as measured by student responses.

2. Students in general have a positive valence toward school, although they do not wish to spend more time in school. Elementary pupils like school more than secondary pupils, although the general hypothesis was more confirmed at the secondary than the elementary level.

3. Pupils in general but especially elementary pupils, appear to be concerned about their schoolwork. This concern seems to be more prevalent in target than control schools.

4. Students indicate a high degree of parent involvement in their education but more so for elementary than secondary pupils. No significant difference among PT, ST, or C schools was noted in terms of parent involvement.

5. Aspiration level, as reflected by the hope to graduate from high school (89%) and to go on to college (82%) is high. There is evidence that college aspiration does lower from elementary to secondary level, but aspiration for high school graduation increases from elementary to secondary level. Most pupils believe they are doing better in their schoolwork, but elementary pupils believe so more than secondary pupils.

6. Good reading habits were more prevalent among elementary than secondary pupils, but no significant differences were noted among PT, ST, and C. Pupils indicate they enjoy field trips (95%) and that the trips help in their schoolwork (74%). PT pupils at the secondary level seemed to be helped most in their schoolwork by field trips. About 3 out of 4 pupils indicated they have hobbies, but no significant difference was noted among PT, ST, or C.

Finally, it is of importance to note the discrepancies between student and teacher responses to similar areas. Teachers view parent interest and involvement low, while pupils rate it high. Similarly, teachers rate pupil aspiration, concern over schoolwork (motivation) and general student attitude toward school as being low, while student response would indicate these categories are high. What are the causes of these discrepancies assuming the responses of both groups are valid? How, for example, can 82 per cent of all pupils indicate a hope to go to college yet possess characteristics, as seen by teachers, that mitigate against further education? Understanding this complex problem is crucial to developing an effective program.

RESULTS OF PARENT SURVEY

Rationale

To a significant extent, the objectives of the various ESEA projects are directed toward achieving more active parent participation and interest in the school. The Parent Education project has this goal as its major objective. It is presumed that the motivation of students toward school is largely related to the interest and involvement of the parents in their child's education. The survey was not given with the intention of measuring the effectiveness of projects per se. In all probability, parents would know little about the Education Act projects or services and certainly would not know projects by name. Instead, the strategy was to measure overall interest and involvement in the school and obtain their reactions in terms of observable behaviors of their own children.

Description of Survey

From a listing of all pupils enrolled in each target and control school, a five per cent random sample was drawn. From this sample a group of 20 pupils was selected randomly from each public school and a corresponding percentage from each non-public school. The parents of these children were interviewed individually by para-professional workers employed under the Parent Education project. In control schools, interviews were made either by parent aides or through volunteer help of the P.T.A. In cases where the parents identified in the sampling process could not be interviewed, workers were instructed to contact the next parent on the master list. Of the original sample, 72.8 per cent were interviewed.

The interview consisted of reading a fourteen item questionnaire to which the respondent answered, "much," "some," "not at all," to each item. For analytic purposes, the responses "much" and "some" were grouped together as affirmative responses while "not at all" was considered a negative response.

Method of Analysis

The responses of parents were grouped in two ways: by type of school (PT, ST, C) and grade level (elementary, secondary) in which their child was enrolled. The general hypothesis that PT>ST>C was tested by chi square analyses of affirmative responses for each item disregarding grade level. Similarly, chi square analyses were made by grade level differences disregarding type of school.

Results

Per cents of affirmative parent responses to each questionnaire item, by type of school and grade level of child, are shown in Table 6. Inspection of the total response column indicates an average of 85 per cent affirmative responses. The items receiving the highest affirmative responses (97%) were: "Does (your child) like school?" and "Do you like (school's name) school?". Ninety-five per cent of the parents believe teachers and principals are "interested" in their children, and 94 per cent believe their children are improving in their schoolwork.

When asked, "Are you in any way active in the school?" only 37 per cent answered affirmatively; yet, 81 per cent indicated that they were encouraged to participate in school activities, and 90 per cent wish to "know more about" their child's school. If one accepts these responses as valid, there seems to be a fertile field for more parent participation if ways can be devised to attract them or possible school-home barriers can be lowered. It is unfortunate that the instrument did not explore why parents do not participate in the school.

Table 6. Percents* of Affirmative Responses to Parent Questionnaire Items by Type of School and Grade Level in which Parent's Child is Enrolled.

ITEMS		PRIMARY TARGET		SECONDARY TARGET		CONTROLS		TOTAL ALL RESPONSES
		Elem.	Sec.	Elem.	Sec.	Elem.	Sec.	
	N=	(203)	(73)	(312)	(50)	(40)	(38)	(716)
1. Is ** improving in (his or her) schoolwork?		92%	99%	93%	96%	93%	95%	94%
2. Does ____ study at home?		91	88	90	92	88	92	90
3. Does ____ like school?		97	99	97	100	90	95	97
4. How interested do you think the teacher and principal are in ____?		99	100	93	96	85	82	95
5. Does the school help ____ stay out of trouble in the neighborhood?		91	97	76	94	70	72	83
6. Does ____ read at home?		95	95	92	96	95	89	93
7. Has ____ become more helpful around the house because of what (he or she) is learning in school?		79	88	70	94	68	68	76
8. Does the school help ____ behave better at home?		92	94	82	94	70	62	85
9. Does the school help you do more things with ____?		89	96	80	90	78	67	84
10. Has the school helped ____ in the use of (his or her) out-of-school time?		84	90	80	92	78	65	82
11. Have you been encouraged to participate in school activities?		84	81	82	78	73	70	81
12. Are you in any way active in school?		42	47	32	47	28	16	37
13. Do you like ______ school?		99	96	97	94	100	92	97
14. Would you like to know more about ______ school?		89	99	92	96	80	70	90
MEAN %		87	91	83	90	78	74	85
		88		85		76		

*All percents are rounded to nearest whole number.
**The interviewer inserted the child's name in the blank spaces as the question was read.

Further inspection of Table 6 reveals highly similar results among parents in PT, ST, and C school areas as well as between elementary and secondary level schools. No chi square statistic reached the five per cent level of significance among PT, ST, and C schools except item 12, "Are you in any way active in school?" The general hypothesis of PT>ST>C was confirmed for this item. Since the Parent Education project operates in both PT and ST schools, the fact that PT schools exceeded ST schools probably means that parent activity in school is encouraged through several projects, e.g., the Early Childhood Education project, which operates mainly in PT schools.

Conclusions

1. There was an expression by parents of high positive valence toward school. For example, 97 per cent of the parents like the school their child attends and believe their children like the school.
2. While parents seem to be highly interested in school, the amount of active participation is relatively low as shown by the fact that only 37 per cent indicated that they were active in the school. It is inferred that more ways need to be discovered to attract parents to the school and to identify possible barriers to their more active participation.
3. Parents of elementary school children responded similarly to parents of secondary school children in relation to all items on the questionnaire.

PUPIL ACADEMIC ACHIEVEMENT

Rationale

Most of the objectives of the Education Act projects aim at changing pupil behavior in various ways. Many of these changes may be viewed as changes in personality or value structure, e.g., self-image or the value to prize education. Important as these objectives are, a sustained increase in academic achievement would be a highly desirable result of the program. To a large extent, objectives other than higher achievement are viewed as intermediate steps or pre-conditions to higher achievement. Increased pupil attendance, motivation and self-concept, for example, are usually valued not only because of their presumed intrinsic worth, but also because it is believed that with these characteristics pupils will achieve better. Certainly the traditional and still most accepted purpose of formal education is to provide pupils with the basic academic tools thought to be needed to function in our society. It is no matter of chance that state and federal authorities insist on the measurement of academic achievement in evaluating Education Act programs. Implicitly or explicitly, each of the thirteen projects composing the Education Act program in 1965-66 was aimed at increasing pupil achievement. As important as increased achievement may be, numerous studies measuring the effects of various compensatory education efforts reveal that higher achievement is extremely difficult to attain, especially over sustained periods of time.

The data presented in this section are viewed primarily as baseline data. Comparisons of pupil achievement for the school year 1965-66 in relation to previous years are not made because of their tenuous validity.

In addition to providing baseline data, the achievement test results serve other purposes. Analysis of test results, for example, can be used for diagnostic purposes. Such results can be used to determine the emphasis and direction of remedial effort for successive years. Secondly, achievement results obtained over successive grade levels do reveal the pattern of achievement typical of disadvantaged children. Patterns of academic development will be useful to teachers in terms of understanding pupil growth. Changes in these patterns, in effect, represent the goal of many of the Education Act projects.

Method of Analysis

In all target and control schools standardized achievement tests were administered to grades two through eleven in May, 1966, with the exception of grade six, where public school pupils were tested in February as part of the regular city-wide testing program. The tests were administered by teachers, but machine scored in all grades except grades two and three, where pupils are too young to use separate answer sheets. All tests were administered in late May within a period of approximately one week. The test battery and test form given at each grade level are shown below:

Standardized Achievement Tests Given by Grade Level

Grade Level	Test Used
2	Metropolitan Primary I, Form A
3	Stanford Primary II, Form X
4	Stanford Intermediate I, Form X
5 & 6	Stanford Intermediate II, Form X
7, 8, & 9	Stanford Advanced, Form W
10 & 11	Stanford High School Basic, Form W

The above tests were analyzed only for pupils in regular classes, thus excluding pupils in slow learning classes, classes for blind and deaf, and special classes for the physically and emotionally handicapped children.

Distributions of raw scores for each subtest were made for primary target, secondary target, and control schools. From these frequency distributions, the three quartile points were computed and finally converted into grade scores in grades two through nine. The quartile points in grades ten and eleven were converted to standard scores rather than grade scores. (Grade scores at the high school level are inappropriate.)

Previous experience with the newly revised Stanford Battery has shown the norms to be demanding, i.e., it is a "difficult" test. The reason is that the pupils on whom the norms were established tended to be above average in scholastic aptitude. The mean I.Q. of the standardization population was between 106 and 109. When such tests are used on a population similar to that of Cincinnati, where the mean I.Q. of the general population is close to 100, the consequence is that grade scores will appear to be lower, unless scholastic aptitude is taken into account. Adjusted grade scores based on pupil scholastic aptitude will not be presented except for illustrative purposes since the basic intent of this study is to provide baseline data. Since the same batteries will be administered in May, 1967, the focus will be on increase from May, 1966, rather than on the measurement of achievement compared to national norms, per se. The tests used were selected primarily because of the appropriateness of their content.

Results

The results of the standardized achievement tests given in grades two through nine are shown in Table 7. The data shown in Table 7 are numerous and complex but do reveal some very interesting results. Close inspection reveals that the achievement of pupils in primary target, secondary target, and control schools is distinctly different. In contrast to the general hypothesis of PT>ST>C, the test results reveal the reverse situation, i.e., C>ST>PT. This result certainly comes as no surprise for, indeed, it is these achievement differences that were used in identifying PT, ST and C schools. As will be seen more clearly later on, secondary target schools exceed the general achievement of the primary target schools by 1 to 4 months at the median level of achievement. The control schools, on the other hand, exceed the secondary target schools by 1 to 13 months. Thus, it is apparent that there is a closer similarity between PT and ST schools than there is between target and control schools. It is also evident that the median grade scores at all grade levels do not reach the norm.

In order to detect relative strengths and weaknesses of the pupils tested, the subtests which showed the highest achievement for each grade level were noted as well as the subtests which showed the lowest achievement. There was a great deal of consistency among PT, ST and C schools in terms of their relative performance on subtests. All three types of schools showed the highest subtest performance to be in the area of spelling, followed by arithmetic computation. The subtest on which pupils did least well was in the area of language, dealing with grammar, punctuation, sentence structure, etc. On all batteries containing a language subtest, performance on this subtest was lowest, with the exception of grade four where it was second lowest. Understanding why this differential achievement occurs is important in terms of teaching emphasis and teaching strategy.

Perhaps the most striking fact shown in Table 7 is the so-called "cumulative deficit." In this context, it means that the older the child becomes, the greater is his deviation from the norm. Thus, there is no "catching up" phenomenon. To illustrate, consider the battery mid-scores (Q_2) for primary target schools from grades two through nine. When these scores are subtracted from the appropriate

Table 7. Summary of Standardized Achievement Test Grade Scores by Grade, Subtest, and Type of School. (a)

Grade Level (Grade Norm) Battery Used Subtest	Quartiles:	Type of School Primary Target Q1	Q2 Mdn.	Q3	Secondary Target Q1	Q2 Mdn.	Q3	Control Q1	Q2 Mdn.	Q3
GRADE 2 (Norm: 2.9)			N=1452(b)			N=2303			N=347	
Metropolitan Primary I, Form A										
Word Knowledge		1.9	2.2	2.9	1.9	2.4	2.9	1.9	2.2	2.9
Word Discrimination		2.0	2.5	3.1	2.0	2.5	3.1	2.1	2.5	3.6
Reading		1.9	2.2	2.9	1.9	2.3	3.0	1.9	2.3	3.2
Battery Mid-Score		1.9	2.2	2.9	1.9	2.4	3.0	1.9	2.3	3.2
GRADE 3 (Norm: 3.9)			N=1328			N=2475			N=344	
Stanford Primary II, Form X										
Word Meaning		2.1	2.7	3.1	2.3	2.8	3.3	2.6	3.1	4.0
Paragraph Meaning		2.0	2.6	3.1	2.2	2.7	3.2	2.5	3.0	3.7
Arithmetic Computation		2.6	3.0	3.6	2.6	3.1	3.7	2.9	3.6	4.2
Arithmetic Concepts		2.2	2.6	3.2	2.3	2.7	3.4	2.6	3.2	4.4
Battery Mid-Score		2.2	2.7	3.2	2.3	2.8	3.4	2.6	3.2	4.1
GRADE 4 (Norm: 4.9)			N=1300			N=2375			N=306	
Stanford Intermediate I, Form X										
Word Meaning		2.9	3.3	3.9	3.0	3.5	4.2	3.1	3.8	4.7
Paragraph Meaning		2.6	3.0	3.8	2.7	3.2	4.1	2.8	3.6	4.7
Spelling		3.2	3.8	4.5	3.3	3.9	4.6	3.3	3.9	4.7
Word Study Skills		2.2	2.7	3.3	2.3	2.8	3.7	2.4	2.9	4.3
Language		2.6	3.0	3.6	2.6	3.1	3.9	2.7	3.2	4.2
Arithmetic Computation		3.1	3.7	4.3	3.2	3.8	4.5	3.3	4.0	4.5
Arithmetic Concepts		2.6	3.3	4.2	2.7	3.6	4.5	2.8	3.9	4.8
Arithmetic Applications		3.1	3.7	4.2	3.2	3.9	4.5	3.3	4.0	4.8
Social Studies		3.4	3.7	4.1	3.5	3.8	4.2	3.5	3.8	4.4
Science		3.3	3.6	4.0	3.4	3.7	4.2	3.4	3.8	4.4
Battery Mid-Score		3.0	3.5	4.1	3.1	3.7	4.2	3.2	3.8	4.6
GRADE 5 (Norm: 5.9)			N=1161			N=2130			N=269	
Stanford Intermediate II, Form X										
Word Meaning		3.2	3.9	4.7	3.5	4.2	5.3	3.6	4.5	5.9
Paragraph Meaning		3.1	3.9	4.7	3.4	4,2	5.2	3.5	4.4	5.7
Spelling		3.9	4.6	5.6	4.0	4.8	6.0	4.2	5.1	6.2
Language		3.0	3.4	4.2	3.1	3.7	4.8	3.1	3.9	5.5
Arithmetic Computation		3.7	4.5	5.2	4.3	4.8	5.4	3.8	4.6	5.6
Arithmetic Concepts		3.7	4.4	5.1	3.9	4.5	5.3	4.2	4.9	6.0
Arithmetic Applications		3.6	4.1	4.8	3.7	4.3	5.2	3.6	4.4	5.6
Social Studies		3.8	4.2	4.7	3.8	4.3	5.0	3.9	4.5	5.5
Science		3.4	3.8	4.4	3.6	4.1	4.9	3.6	4.3	5.5
Battery Mid-Score		3.6	4.1	4.7	3.7	4.3	5.2	3.6	4.5	5.6

(a) All tests were administered in May, 1966 with the exception of the sixth grade which was tested in February, 1966. The grade norm, therefore, is the grade level plus 9 months except for grade six where the grade norm is 6.6.

(b) In each case N equals the average number of pupils taking each subtest.

Table 7. Summary of Standardized Achievement Test Grade Scores by Grade, Subtest, and Type of School.

Grade Level (Grade Norm) Battery Used Subtest	Type of School								
	Primary Target			Secondary Target			Control		
Quartiles:	Q_1	Q_2 Mdn.	Q_3	Q_1	Q_2 Mdn.	Q_3	Q_1	Q_2 Mdn.	Q_3
GRADE 6 (Norm: 6.6) (c)									
Stanford Intermediate II, Form X		N=1120			N=1831			N=268	
Word Meaning	3.8	4.6	5.6	3.9	4.7	5.7	4.1	5.1	6.4
Paragraph Meaning	3.8	4.6	5.7	3.9	4.7	5.9	4.2	5.4	7.1
Spelling	4.2	5.1	6.3	4.3	5.3	6.5	4.5	5.6	6.7
Language	3.3	4.1	5.2	3.5	4.4	5.5	3.5	4.8	6.7
Arithmetic Computation	4.3	5.0	5.8	4.3	5.1	5.9	4.9	6.0	7.9
Arithmetic Concepts	4.0	4.7	5.5	4.1	4.8	5.8	4.4	5.7	7.8
Arithmetic Applications	3.9	4.5	5.5	4.0	4.7	5.6	4.2	5.7	7.4
Battery Mid-Score	3.9	4.6	5.6	4.0	4.7	5.9	4.2	5.6	7.1
GRADE 7 (Norm: 7.9)									
Stanford Advanced, Form W		N= 945			N=1860			N=307	
Paragraph Meaning	4.3	5.2	6.1	4.6	5.6	6.6	5.4	6.4	8.0
Spelling	4.7	6.1	7.4	5.1	6.6	7.9	5.7	7.0	8.0
Language	4.0	4.8	5.8	4.3	5.2	6.4	4.7	6.1	7.4
Arithmetic Computation	4.5	5.4	6.2	4.7	5.6	6.3	5.2	6.0	7.2
Arithmetic Concepts	5.2	6.0	6.8	5.3	6.0	6.9	5.8	6.4	7.6
Arithmetic Applications	5.3	6.0	7.0	5.3	6.1	7.2	5.7	6.6	7.6
Social Studies	4.8	5.5	6.4	5.0	5.9	6.8	5.7	6.6	8.0
Science	4.6	5.2	5.9	4.7	5.5	6.4	5.0	6.2	7.6
Battery Mid-Score	4.7	5.5	6.3	4.9	5.8	6.7	5.6	6.4	7.6
GRADE 8 (Norm: 8.9)									
Stanford Advanced, Form W		N= 876			N=1685			N=260	
Paragraph Meaning	5.0	6.0	7.1	5.3	6.4	7.9	6.3	7.6	10.1
Spelling	5.2	6.7	7.7	6.0	7.3	8.9	6.7	7.9	9.9
Language	4.6	5.4	6.6	4.7	6.1	7.6	5.8	7.0	8.9
Arithmetic Computation	5.1	5.8	7.5	5.5	6.4	8.0	6.3	7.6	8.6
Arithmetic Concepts	5.6	6.5	7.7	5.9	6.7	8.0	6.3	7.5	9.3
Arithmetic Applications	5.6	6.5	7.7	5.7	6.8	7.8	6.2	7.4	8.4
Social Studies	5.2	6.2	7.2	5.6	6.6	7.8	6.6	7.7	9.1
Science	5.0	5.8	6.9	5.4	6.2	8.0	6.1	7.6	10.5
Battery Mid-Score	5.2	6.1	7.3	5.6	6.5	8.0	6.3	7.6	9.2
GRADE 9 (Norm: 9.9)									
Stanford Advanced, Form W		N= 630			N=1276			N=229	
Paragraph Meaning	5.4	6.4	7.7	5.6	6.6	8.2	6.8	8.7	10.7
Spelling	6.2	7.7	9.4	6.4	7.6	9.2	6.8	8.4	10.6
Language	4.9	5.8	7.2	5.2	6.3	7.6	6.0	7.6	9.7
Arithmetic Computation	5.7	6.6	8.2	5.8	6.8	8.2	6.4	7.9	9.2
Arithmetic Concepts	6.2	7.1	8.1	6.2	7.2	8.4	6.6	7.8	10.3
Arithmetic Applications	6.0	7.2	7.9	6.0	7.2	8.1	6.7	7.9	9.9
Social Studies	5.8	6.7	7.8	6.0	6.8	8.1	7.0	8.2	10.6
Science	5.4	6.4	8.1	5.6	6.7	8.8	6.5	8.4	10.6
Battery Mid-Score	5.8	6.7	8.0	6.0	6.8	8.2	6.8	8.1	10.5

(c) These data do not include non-public school children since they were tested in May rather than February.

grade norm the following deviations from the norm are obtained:

Grade	Months of Deviation From Norm For PT Schools (Q_2)
2	-7
3	-12
4	-14
5	-18
6	-20
7	-24
8	-28
9	-32

The preceding data are typical for ST and C schools as well as for other quartile points. The data show that by the time these children complete grade three they are approximately one year below norm in general achievement. By the end of grade six, they are about two years below norm, and by the end of grade nine, they are about three years below the norm.

The test results for grades 10 and 11 shown in Table 8 are reported as standard scores with a mean of 50 and a standard deviation of 10.

Table 8. Summary of Standardized Achievement Test Standard Scores* for Grades 10 and 11 in Primary Target School.

Grade Level (Norm) Battery Used Subtest	Standard Scores Q_1	Q_2 Mdn.	Q_3
GRADE 10 (50)		N=402	
Stanford High School, Form W			
Reading	36	41	46
Numerical Competence	35	41	46
Mathematics, Part A	39	45	49
Battery Mid-Score	36	41	46
GRADE 11 (50)		N=259	
Stanford High School, Form W			
Reading	38	43	48
Numerical Competence	35	41	46
Mathematics, Part A	38	44	50
Battery Mid-Score	37	42	47

*The standard scores have a mean of 50 and a standard deviation of 10.

A language subtest was administered but unfortunately was mis-scored and destroyed before it was realized that they were mis-scored. There is reason to believe, however, that performance on this test would have been lowest--thus paralleling the findings at the elementary and junior high levels. Performance on the mathematics test was highest, a fact which is reminiscent of relatively high achievement on the arithmetic computation test in the elementary grades.

While the grade score comparison from grade to grade shows that pupils increasingly deviate from norm as they get older, their rate of educational growth is highly uniform. This fact is shown when battery mid-scores are plotted against national grade norms for each grade as in Figure 1. The pattern of development can almost be characterized as a straight line which is, of course, a function of the way grade norms are developed. The rate of growth for target school children is usually five to seven months per school year.

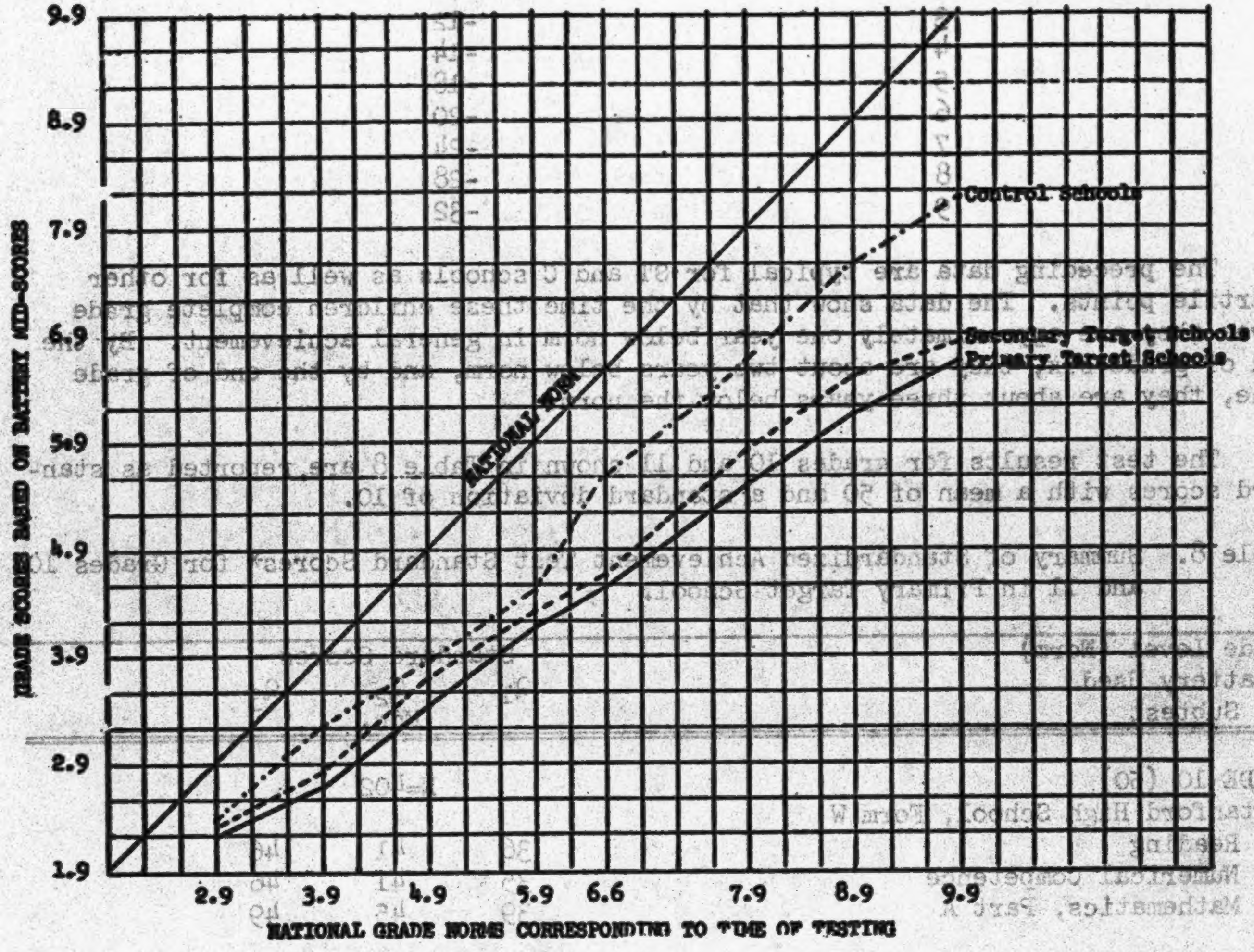

Figure 1. Battery Mid-Scores (Grade Scores) Plotted Against National Grade Norms from Grade Two through Nine for Primary Target, Secondary Target, and Control Schools.

Conclusions

1. As expected, control schools showed higher general achievement than secondary target schools which, in turn, showed higher general achievement than primary target schools. This finding simply confirms our classification of schools in which the emphasis in services is given in primary target schools.

2. These children achieved relatively highest on spelling and arithmetic computation and relatively lowest on language. This finding was consistent from grade to grade.

3. As target school children progress through the grades, they increasingly deviate from national achievement norms, although they do appear to remain relatively constant (perhaps with a slight increase) in their ranked position (percentile rank) with respect to the national group.

4. The educational development (as shown by cross-sectional data) of target school children is highly uniform. Their average annual growth in months of achievement is about five to seven months.

PUPIL SELF-IMAGE

Rationale

Improvement of pupil self-image is a key objective of the Education Act program in Cincinnati. In identifying the special educational needs of disadvantaged children to serve as a basis for organizing projects, teachers, principals and various personnel specialists repeatedly emphasized the importance of enhancing the self-image of these children. This is in contrast to the typical teacher tendency to identify higher achievement as the most pressing need, or such goals as higher motivation, better work-study habits, etc. Personnel who work with disadvantaged children believe a child must feel good about himself before he is capable of school achievement. A positive self-image is seen as the underpinning for school and academic motivation, which in turn are viewed as prerequisites to higher school achievement. Thus, all the projects which give direct service to children have as one of their objectives the strengthening of pupil self-image.

Important as this self-image may be, its measurement is most elusive. Before measurement can be accomplished, there must be an accepted definition of what is to be measured. Agreement on the definition of self-concept is lacking. For purposes of this study, however, self-concept is defined as the picture a person derives of himself from his bodily experiences, drives, and interpersonal experiences. The self-concept, then, involves all aspects of the person as they are organized around his self-image. Researchers have found that self-concept becomes more or less stable over time and is a characteristic structure of the ego.

Description of Survey

Three instruments were used to evaluate self-concept: What I Am Like, Attitude Toward Self and School, and the House-Tree-Person test. These instruments were administered to random samples of pupils in target and control schools by school psychologists. What I Am Like was given to 847 pupils in grades four through nine, Attitude Toward Self and School was used with a sample of 642 primary grade pupils and House-Tree-Person was taken by 1299 pupils in grades one through nine. Although these three instruments may be viewed as having construct or theoretical validity, none has established predictive validity. As highly experimental measuring devices, they should not be considered generally reliable for individual pupil diagnosis.

What I Am Like measures self-concept by having pupils rate themselves on a five-point, bi-polar adjective scale. This technique is based on Osgood's concept of the semantic differential.

The instrument consists of three subtests of ten items each. The first subtest, What I Look Like, consists of adjectives characterizing physical attributes. The second, What I Am, attempts to measure self-image from a psychological point of view. The third, What I Am Like When I Am With My Friends, concerns social attributes.

The Attitude Toward Self and School or "Faces" test consists of 18 items, each having two circles drawn to represent a smiling and frowning face. The pupil is asked to blacken the nose of the picture that describes how he feels when the examiner reads a particular statement. For example, "How do you feel about how well you read?" and "How do you feel when you get your report card and take it home?" were two of the 18 items. It was assumed that if a pupil marked the smiling face this indicated a positive attitude toward whatever was being measured. On the other hand, if he marked the frowning face, this was assumed to mean that his feelings were more negative.

The House-Tree-Person test is a projective technique in which pupils draw these three commonly experienced objects. The technique assumes that children (and others) express their drives, needs, and interpersonal experiences in the drawings they make. A review of several studies relating self-concept to children's drawings revealed 18 possible hypotheses, eight of which seemed to have the support of experimental evidence and clinical cross-validation by more than one author. Pupil drawings were scored for the following eight factors: size of the first person drawn; degree of discrepancy of first person from the vertical position; detailing in drawings; detailing of face in the first person drawn; position of drawn wholes on the pages; degrading of drawings; sex of the person drawn first; and distortion of drawings.

A scoring system was developed to measure the degree of presence of each factor. Each factor was scored on a three-point scale making the maximum score 24, i.e., eight factors times three points each. Since this scoring system is unique, no norms are available.

Method of Analysis

The data yielded by the three self-concept instruments were compiled and treated with suitable statistical tests. In each case a comparison of primary target, secondary target, and control schools was made to test the general hypothesis: PT>ST>C.

Results

What I Am Like. Means were computed for each of the 30 bi-polar traits on What I Am Like. Means were figured separately for PT, ST, and C schools at each level, elementary and secondary. These means are shown in Table 9.

Inspection of this table shows a high degree of similarity in the means for individual items as well as subtest means. The eighteen subtest means reported by level and type of school vary from a low of 3.51 to a high of 3.95; thus showing a high degree of similarity. The overall subtest means for What I Look Like, What I Am, and What I Am Like When I Am With My Friends are seen to be 3.88, 3.82, and 3.77, respectively. Thus, it would appear that there is little difference in the physical, psychological, and social concepts of self as measured by this instrument.

Only fourteen means out of the 180 presented in Table 9 were below the 3.00 point, which may be viewed as the neutral point. Most of the twelve means below the neutral point were obtained from items in which it was difficult to identify the positive from the negative pole, e.g., listen-tell.

Inspection of the last column of Table 9 which lists the grand means for each item, ignoring school classification, reveals that the highest five means were obtained for: clean, 4.69; friend, 4.60; together, 4.54; happy, 4.52; and somebody, 4.51. Only three traits had an average response below the 3.00 mark: listen, 2.36; follower, 2.93; and shy, 2.95.

The data in Table 9 were analyzed through a three way analysis of variance; level of school, type of school, and subtest. The ten means within each subtest and within a given level and type of school were viewed as random samples of means each measuring what the subtest is intended to measure. Thus, the error variance was viewed as that represented within each of the 18 cells of the table. The strategy was to test for significance of overall between variance. If this variance were found to be significant, separate tests for school level difference, type of school differences, and subtest differences would follow. The F-ratio obtained from the overall between variances to within variance, however, had a value of

Table 9. Summary of Means* for "What I Am Like" Administered to Random Samples of Elementary and Secondary Level Pupils in Primary Target, Secondary Target, and Control Schools.

ITEM	ELEMENTARY			SECONDARY			
	Primary Target N=169	Secondary Target N=280	Control N=41	Primary Target N=124	Secondary Target N=209	Control N=24	Total Item Means N=847
A. What I Look Like							
1. Short - Tall	3.12	3.16	3.32	3.23	3.20	3.08	3.18
2. Slow - Quick	3.99	3.89	3.98	3.87	3.69	3.88	3.86
3. Small - Big	3.10	3.10	3.05	3.10	2.99	2.79	3.06
4. Weak - Strong	3.98	3.95	3.80	3.85	3.67	3.33	3.85
5. Dirty - Clean	4.64	4.63	4.59	4.84	4.72	4.71	4.69
6. Lazy - Busy	4.32	3.20	3.07	4.01	3.72	3.58	4.05
7. Ugly - Good Looking	3.88	3.97	3.71	3.86	3.65	3.29	3.83
8. Fat - Thin	3.39	3.50	3.44	3.19	3.26	3.42	3.37
9. Sick - Healthy	4.45	4.57	4.59	4.41	4.47	4.63	4.50
10. Sleepy - Awake	4.50	4.57	4.44	4.44	4.26	4.38	4.45
Subtest Means	3.94	3.95	3.90	3.88	3.76	3.71	3.88
B. What I Am							
1. Sad - Happy	4.32	4.40	4.24	4.26	4.04	4.25	4.26
2. Nobody - Somebody	4.64	4.60	4.51	4.54	4.32	3.92	4.51
3. Empty - Full	4.01	4.07	4.07	4.01	3.78	3.63	3.97
4. Bad - Good	4.10	4.06	4.34	4.02	3.83	3.63	4.01
5. Angry - Kind	4.20	4.17	4.29	4.17	4.06	3.83	4.15
6. Question - Believe	3.43	3.40	3.10	2.98	3.19	3.08	3.27
7. Shy - Bold	2.91	3.05	2.80	3.07	2.83	2.79	2.95
8. Loser - Winner	3.61	3.49	3.61	3.57	3.27	3.13	3.47
9. Unimportant - Important	3.86	3.78	4.02	4.00	3.66	3.33	3.80
10. Dumb - Smart	3.93	3.93	4.10	3.93	3.65	3.46	3.86
Subtest Means	3.90	3.90	3.91	3.86	3.66	3.51	3.82
C. What I Am Like When I Am With My Friends							
1. Receive - Give	3.98	3.98	3.83	3.65	3.58	3.83	3.82
2. Sad - Happy	4.62	4.60	4.73	4.37	4.38	4.50	4.52
3. Alone - Together	4.58	4.59	4.51	4.56	4.46	4.42	4.54
4. Hurt - Help	4.23	4.35	4.32	4.15	4.09	4.00	4.22
5. Listen - Tell	2.10	2.27	2.37	2.57	2.53	2.67	2.36
6. Fight - Agree	4.19	4.27	4.29	3.94	3.89	3.92	4.10
7. Little - Big	3.25	3.30	3.24	3.32	3.23	3.17	3.27
8. Enemy - Friend	4.59	4.60	4.61	4.67	4.58	4.63	4.60
9. Follower - Leader	2.91	2.79	3.02	3.00	3.06	3.04	2.93
10. Last - First	3.22	3.26	3.44	3.48	3.44	3.54	3.35
Subtest Means	3.77	3.80	3.84	3.77	3.72	3.77	3.77
GRAND MEANS BY TYPE OF SCHOOL	3.87	3.88	3.88	3.84	3.72	3.66	3.83

* The means in this table are based on a five point rating scale with one representing the negative pole of the trait and five the positive pole of the trait. A rating of three may be viewed as neutral. Each bi-polar trait is listed with the negative pole first for ease of interpretation. The instrument, however, randomized positive and negative poles in the various items.

less than one. Therefore, it was concluded that no significant difference in the means was apparent, thus: PT=ST=C.

Attitude Toward Self and School. For each item on the "Faces" test the proportion of children marking the smiling face was computed for the PT, ST, and C groups. These proportions are shown in Table 10. In general terms, it would appear that most of these youngsters have fairly positive concepts of self and others, and their attitudes toward school seem basically positive, too. That is, since a majority of pupils marked the "smiling" face in each of the 18 items rather than the "frowning" face, their attitudes toward self and school seem essentially positive in nature. Because normative data or comparable data from other children is not available, however, this generalization must be considered tentative.

Table 10. Proportion of Children Marking "Smiling" Faces by Type of School and Item.

Item No.	Item	Primary Target	Secondary Target	Control
	N=	263	322	57
8.	About how healthy and strong you are	97%	95%	96%
3.	When you have a chance to learn something	94	96	96
9.	About how well you read	94	93	98
14.	About how much you know	92	92	100
6.	When you think about how fast you learn	92	89	95
13.	When you get your report card and take it home	92	83	84
18.	When teacher says it's your turn to read out loud	90	88	91
15.	About how well you do arithmetic	89	85	89
11.	About how well you look and the kind of face you have	88	86	86
17.	About the way your teacher treats you	84	77	89
4.	When you think about going home after school each day	79	79	86
7.	When teacher says she is going to give a test	73	63	72
5.	When teacher tells you to get out your books and begin work	72	62	72
16.	When you think about next year in school	72	66	74
10.	About the way the neighbors treat you	72	67	72
1.	About growing up and getting older	70	81	84
12.	About the way other children treat you	64	55	68
2.	When its time to get up and go to school	63	57	61
	TOTAL PERCENT BY TYPE OF SCHOOL	82	79	84

From the rank ordering of items described in Table 10, another generalization seems evident. Items 3, 9, 14, 6, 13, 18 and 15 all pertain to a child's attitudes toward school, and all of these items fall in the upper half of the rank order listing. This would seem to suggest that these children's attitudes toward school, especially, are positive.

On the other hand, those items which fall in the lower half of the listing seem to reflect two different kinds of concerns. Several items are "future" oriented (i.e., 4, 16 and 1), and other items refer to the way a child feels other persons relate to him (i.e., 12 and 10). Obviously, no firm conclusions can be drawn from these data at all, but there does seem to be a hint of negative outlook toward the future and a feeling of negative treatment by other persons (neighbors and other children).

Chi square analyses were made for each item to test for differences among type of school. None of the 18 analyses showed significant differences. Thus, PT=ST=C with respect to self-image among primary grade children.

House-Tree-Person. Scores on the House-Tree-Person instrument were grouped by primary grades 1-3, intermediate grades 4-6, and secondary grades 7-9, thus resulting in a three by three table of type of school (PT, ST, and C) and grade level (primary, intermediate and secondary). The mean scores are shown in Table 11.

Table 11. Mean Scores Obtained from the House-Tree-Person Test Scored to Measure Self-Image by Grade Level and Type of School.

Grades		PT Mean (N)	ST Mean (N)	C Mean (N)	Total Mean (N)
1-3		14.65 (168)	14.91 (281)	14.60 (48)	14.79 (497)
4-6		17.46 (154)	17.73 (256)	17.16 (38)	17.59 (448)
7-9		18.56 (124)	17.97 (207)	19.57 (23)	19.04 (354)
	TOTALS	16.71 (446)	16.73 (744)	16.54 (109)	16.91 (1299)

Inspection of these means in Table 11 shows them to be highly similar among PT, ST, and C schools within grade levels. There is a very distinct increase in score, however, as children increase in age-grade level. Total means by type of school are very similar.

The analysis of variance was complicated by the fact that there were unequal numbers in the cells in the table. An approximation method was used as described by Snedecor.[1] The analysis of variance confirmed what is obvious from Table 11, that is, that grade differences were significant, and that type of school differences were non-significant. Not so apparent from Table 11, however, was a significant interaction between grades and type of school. Closer inspection of Table 11 reveals this interaction to result from within the secondary grades 7-9. In the secondary grades, it is seen that control schools were higher than primary target schools, which in turn were higher than secondary target schools. This significant interaction should be viewed as tentative because of the small number of pupils in the sample from the control schools (23).

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[1] Snedecor, George W., Statistical Methods, Iowa State College Press, 1957, page 386.

Since no normative data are available, the only types of comparisons that are possible are internal comparisons. Assuming the instrument is a valid measure of self-concept in terms of the way it was scored and the factors identified, the results seem to contradict earlier studies which indicate that self-image of disadvantaged pupils decreases as they grow older. In this study the overall scores for self-image were increased from 14.79 in the primary grades to 17.59 in the intermediate grades and 19.04 in the secondary grades. This trend was not noted in the What I Am Like instrument, where means at the elementary level were similar to those at the secondary level rather than lower. It is possible that grade level differences in means for the House-Tree-Person are more a function of artistic ability and maturity than they are of self-concept.

Conclusions

1. There is no evidence that the self-image of pupils in primary target, secondary target and control schools is dissimilar, i.e., PT=ST=C.

2. There is no evidence that the self-image of these pupils is poor, although in the absence of normative data and established validity, this conclusion must be highly tentative.

3. As measured by the What I Am Like instrument, there was no apparent difference in the way pupils viewed themselves psychologically, socially, or physically.

4. As measured by the House-Tree-Person test there is no evidence that self-image deteriorates with increased age.

PROMOTION RATES

Rationale

Any attempt to appraise the effectiveness of a program through an examination of promotion rates has at least two underlying assumptions: that the standards upon which promotion decisions are based correspond to the objectives of the program; and that promotional decisions have some degree of validity, that is, that judgments about a pupil's readiness for promotion reasonably reflect his achievement.

If the standards for promotion vary markedly from the general goals of the program, promotion rates can be considered indicative only of the program's effectiveness in accomplishing those ends which are the bases for promotion. Thus, if the purpose of a school program is to help the child develop in all aspects of his person while promotional decisions are based solely on intellectual criteria, promotion rates are relatively meaningless in trying to determine whether the program is achieving its broader purpose.

One must also be willing to assume that teacher judgments about pupils' readiness for promotion are reasonably accurate. Otherwise, there can be little meaning in the comparison of promotion and failure statistics.

Method of Analysis

The aim of this section is to establish baseline data for comparison with promotion rates after continuance of the Education Act program.

Promotion rates were determined by dividing the number of students promoted from each grade by the end-of-year membership for that grade. These ratios were computed for primary target, secondary target and control schools for the years from 1960-61 through 1965-66. Since these data, through at least the first five years, appeared homogeneous, composite percentages for the 1960 through 1965 period were computed for each grade in each type of school. Separate percentages were figured for 1965-66 to permit a comparison after the first five months of the Education Act program, even though no significant changes were anticipated.

Results

The promotion rates for years ending 1961 through 1965 and for 1965-66 are shown in Table 12. The percentages of pupils promoted are lowest at first grade, jump sharply at grade two, increase steadily through sixth grade and decrease markedly in grade seven. There is generally an increase each year from grades seven to nine. The elementary rates are fairly consistent from 1961-65 to 1965-66 with two notable exceptions. These are the percentages from first grade in secondary target and control schools. The sharp increase in both 1965-66 figures is traceable to a few schools in each group having extremely low first grade promotion rates in specific years within the baseline period. Several of these percentages are below 70 and two as low as 61 per cent.

In all elementary grades (excluding kindergarten) for both sets of data the control school percentages are higher than those of target schools. In grades two, four and six, there is little or no difference between the primary target and secondary target percentages. Secondary target rates are higher than primary target for grade three, but the reverse is true for grade five. In grade one the primary target rate is higher for the baseline period, while the secondary rate is higher for 1965-66.

It is interesting to note that in grades seven, eight and nine primary target rates increased appreciably in 1965-66, control school rates increased slightly, but secondary target rates decreased. Although there is no assurance that this phenomenon has any connection with the Education Act program, it is at least partially consistent with the emphasis on services for youth in the primary target schools.

Table 12. Percentages of Pupils Promoted in Primary Target, Secondary Target, and Control Schools by Grade, 1961-65 and 1965-66.

	Primary Target		Secondary Target		Controls	
Grade	61-65*	65-66	61-65	65-66	61-65	65-66
12	91.8%	89.0%	----	----	----	----
11	91.5	85.8	----	----	----	----
10	87.9	90.4	----	----	----	----
9	88.8	95.7	95.9	88.8	94.5	95.7
8	88.6	92.8	91.3	88.2	91.6	94.8
7	88.9	90.7	91.0	87.5	91.2	95.1
6	98.6	98.5	98.4	98.3	99.8	100.0
5	96.6	97.4	95.0	93.4	98.6	99.6
4	94.3	94.8	95.0	95.4	96.2	99.0
3	94.4	93.8	95.4	96.3	96.1	97.7
2	93.5	94.2	92.9	95.0	95.0	96.3
1	81.7	80.2	78.7	86.6	84.0	89.8
K	99.8	99.9	99.8	99.8	99.9	100.0

*Baseline represents composite for five-year period from 1961 to 1965.

Conclusions

1. Promotion rates tend to rise from a low at first grade level through each of the five succeeding elementary school grades. They decrease at seventh grade and generally tend to increase again through the other junior high school years.

2. Where comparisons are possible among PT, ST and C groups (grades K through 9), promotion rates are highest in control schools.

3. Especially in grades seven through nine, primary target school promotion rates increased in 1965-66, while those in secondary target schools showed a marked decline.

PUPIL ATTENDANCE

Rationale

The extent to which pupils attend school is assumed to be a good index of the extent to which they are interested in and motivated for school work. While there is a distinct possibility that a pupil might indicate that he likes school, for example, simply because he is "expected" to like school, it would seem that his daily attendance over a year's period of time would not be subject to the same time sampling problem. Attendance rates are probably unbiased indices of the pupils' attitude toward school.

Obviously, some number of absences are due to illness and other legitimate causes. Since distinguishing between legal and illegal absence is extremely difficult, such an attempt was not made. Instead, total absence figures were collected regardless of cause. It is reasoned that the ESEA program will result in better attitudes toward school and thus be reflected by increased attendance.

Method of Analysis

Annual average daily absence figures were computed for both elementary and secondary level schools and within these levels, for primary target, secondary target and control schools. Average daily absence figures were then divided by average daily membership to arrive at the average per cent of daily absence (APDA). These figures were obtained for six consecutive years starting with 1960-61 and ending in 1965-66.

From this approach it is seen that the data collected should be viewed as baseline data to determine the normal variation in daily absence during the six years before the Education Act program was initiated.

Results

Average per cents of daily absence by year, level, and type of school are shown in Table 13. Inspection of Table 13 reveals three broad generalizations. The first is that APDA at the elementary level is lower than it is at the secondary level. At the elementary level, the APDA for primary target schools is 9.0 for the six year period, 8.7 for secondary target schools, and 8.5 for control schools. At the secondary level, the APDA for the six year period is 13.2 for primary target schools, 10.9 for secondary target schools, and 9.4 for control schools.

The second important generalization is the observation that at both the elementary and secondary level the extent of daily absence is greatest in primary target schools followed by secondary target schools, and least in control schools. In shorthand form with respect to APDA, PT>ST>C. These figures are not surprising, for indeed, the extent of absence may be viewed as one criterion for the identification of primary and secondary target schools.

The third observation from Table 13 shows that the differences in APDA among elementary level schools is much less than it is among secondary level schools. Thus, the largest difference among elementary level schools is between primary target schools (9.0%) and control schools (8.5%) or only .5 per cent difference. From the latter observation one may infer that absence from school is a more sensitive indicator of attitude toward school at the secondary level than it is at the elementary level. In all probability, truancy (in contrast to legitimate absence) at the elementary level is less common than at the secondary level possibly because younger children have fewer places to go and things to do than older pupils; the younger child is more "homebound." It also may be reasoned that secondary level pupils are indeed more dissatisfied with school than are elementary pupils.

Table 13. Average Percent of Daily Absence by Year and Type of School

	YEARS						
	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	Total Average
Elementary Level							
Primary Target Schools	8.8%	8.6%	9.5%	9.7%	8.2%	9.1%	9.0%
Secondary Target Schools	9.0	8.3	9.5	9.6	7.9	8.0	8.7
Control Schools	8.3	8.3	9.0	8.9	8.0	8.4	8.5
Secondary Level							
Primary Target Schools	12.6	13.3	13.1	13.1	13.2	13.8	13.2
Secondary Target Schools	10.6	10.3	10.5	11.4	11.2	11.2	10.9
Control Schools	8.8	9.4	9.8	9.2	9.2	10.2	9.4

Conclusions

1. At both the elementary and secondary level the highest incidence of average daily absence was in primary target schools followed by secondary target schools and control schools. At the elementary level for the six year period the average per cent of daily absence was 9.0 in primary target schools, 8.7 in secondary target schools and 8.5 in control schools. At the secondary level similar statistics showed an average per cent of daily absence of 13.2 in primary target schools, 10.9 in secondary target schools and 9.4 in control schools.

2. Absence in all secondary level schools was greater than absence in elementary schools.

3. The differences in average per cent of daily absence within PT, ST and C schools at the elementary level was smaller than the differences among PT, ST and C schools at the secondary level. From this it is inferred that absence is a more sensitive indicator of a pupil's attitude toward school for secondary level pupils than it is for elementary level pupils.

DROP-OUTS

Rationale

If the Education Act program in Cincinnati is successful, one of its effects should be a noticeable decrease in the drop-out rate, especially in target secondary level schools. Primary target schools, receiving the greatest concentration of services, would be expected to show the most improvement.

To expect such a change after only five months of Education Act services, however, is probably unrealistic. Therefore, this section too, is aimed at establishing baseline data for future comparison.

Method of Analysis

Collecting accurate drop-out data in a large school system is difficult. Standardizing the method of data reporting does not prevent differences in individual judgments on such matters as how situations are classified, how closely pupils should be followed after leaving school, etc. For example, a student whose age is beyond the upper limit of compulsory school attendance might leave a school and move to another city. Such a pupil could be withdrawn as overaged and considered a drop-out, or it could be assumed that he will continue full time education and his change of residence would be the reason for withdrawal.

There is also some amount of ambiguity in the term drop-out itself. The most typical definition of the term includes any pupil who leaves school before graduation or completion of a program of studies without transferring to another full-time school program. Thus, students who continue education in a less structured program than that of the regular day school are generally classed as drop-outs. In addition, it often happens that a pupil leaves school with the idea of terminating his education, but returns later, often to the same program he left.

Of particular difficulty in determining the number of drop-outs in the period from June to September. Students expected at a given school who do not appear when school opens often continue full time education elsewhere. Although an effort is made to trace each of these pupils who is of compulsory school age, there are no collected data that reflect accurately how many are drop-outs.

For this reason the summer vacation period is not included in this report. Only pupils who drop out in the course of the school year are counted. On the other hand, the withdrawal categories identified as drop-out classifications unavoidably include some pupils who continue their education.

Reports of census changes were used to determine the number of pupils who had left school from September to June in each of three years, under one of the following reasons: government services, illness, pregnancy, work permits, home permits, psychological exclusion, superintendent's expulsion, and age beyond compulsory attendance. Also included is an ambiguous category; most often the disposition of these cases was pending at the time of withdrawal. At the secondary level most of these probably discontinued their schooling. At the elementary level it is likely that only a few terminated formal education. Nevertheless, these figures are included in the drop-out ratios for this report since further discrimination is impossible.

A school's drop-out rate is the ratio of the number of drop-outs to the total number of pupils for which the school is accountable (drop-outs plus end-of-year membership). This total accountability figure includes all pupils enrolled in a school in a given year except those who have been withdrawn as deceased or for continuation of education in another school. Graduating seniors are counted in the twelfth grade end-of-year membership.

For each of three years, drop-out ratios at the secondary level were computed for each grade and for special education pupils in primary target, secondary target and control groups. Because few elementary school pupils withdraw from full-time educational programs, a composite ratio was figured for all elementary grades. This ratio includes special education pupils at the elementary level as well as grades seven and eight in schools where these grades are part of the elementary program.

Since drop-out rates are typically highest in grades 10 and 11 and the secondary target and control groups include no senior high schools, percentages were also computed for grades 8 to 12 and special education in all non-target secondary schools. These were compared with the ratios of the composite target group.

Results

Drop-out ratios by grade for primary target, secondary target and control schools over a three-year period are reported in Table 14. As expected, the drop-out rate is highest in grades ten and eleven. There is a decrease from grade ten to grade nine. The rate for eighth grade is usually about half of the ninth grade figure, and this ratio is again cut in half for grade seven. Thus, the seventh grade percentages, like those for all elementary grades, are probably too small to be meaningful. The majority of the withdrawals from kindergarten through grade seven are in the ambiguous miscellaneous category.

Table 14. Percentages of Pupils Dropping Out of Primary Target, Secondary Target and Control Schools (September-June) by Grade and Year.

Grade	Primary Target				Secondary Target				Controls			
	63-64	64-65	65-66	Total	63-64	64-65	65-66	Total	63-64*	64-65	65-66	Total
12	6.2	9.1	6.2	7.3	----	----	----	----	----	----	----	----
11	11.0	13.0	13.7	12.5	----	----	----	----	----	----	----	----
10	12.6	16.6	10.7	13.2	----	----	----	----	----	----	----	----
9	9.1	8.9	10.4	9.5	6.8	6.8	7.3	7.0	9.6	6.0	7.1	7.0
8	5.0	5.7	4.9	5.2	3.5	2.9	3.9	3.4	8.9	5.0	3.5	4.9
7	2.0	1.7	2.0	1.9	1.8	1.7	1.2	1.6	2.0	2.0	0.8	1.4
Special Education Secondary	11.3	9.3	6.0	7.8	2.5	3.6	0.0	2.1	7.6	1.4	2.9	3.0
All Secondary	7.4	7.5	6.3	7.1	3.8	3.7	3.8	3.8	7.1	4.1	3.6	4.2
All Elementary	0.6	0.7	0.7	0.7	0.4	0.4	0.3	0.4	0.5	0.0	0.4	0.3

*Secondary level control school data for 1963-64 are based on only one school.

Where comparison is possible, the drop-out rate is highest among primary target schools, with secondary target and control rates approximately equal (PT ST=C). A notable exception is seen in the control school ratio for 1963-64. These percentages, however, are deceptive. It is important to note that two junior high schools are included in the 1964-65 and 1965-66 statistics, while data for 1963-64 are available only for the control school with the higher drop-out rate.

Another basis for comparing drop-out data is illustrated by Table 15. Here the combined ratios of primary and secondary target schools are compared for grades 8-12 and special education with the ratios of all non-target schools. The results confirm the expectation of consistently higher rates in target schools (except for special education), with most target school rates almost twice as high as comparable non-target figures.

Table 15. Percentages of Pupils Dropping Out of Target Schools Compared with Non-Target Schools (September-June) By Grade and Year.

	Target Schools				Non-Target Schools			
Grade	63-64	64-65	65-66	Total	63-64	64-65	65-66	Total
12	6.2	9.1	6.2	7.3	3.8	4.6	4.6	4.4
11	11.0	13.0	13.7	12.5	6.7	7.0	7.7	7.0
10	12.6	16.6	10.7	13.2	7.9	8.6	8.9	8.5
9	7.6	7.7	8.5	7.9	3.9	4.0	5.1	4.4
8	4.1	4.1	4.3	4.2	2.4	2.0	2.3	2.2
Sp. Ed.	9.2	7.3	3.9	6.7	9.8	7.7	6.7	7.9
TOTAL	6.9	7.3	6.9	7.0	5.3	5.6	6.0	5.7

Certainly the most interesting finding in Table 15 is the contrast between target and non-target groups in year-to-year patterns. In the one target senior high school the drop-out ratios (grades 10-12) show a marked increase in 1964-65, while the 1965-66 ratios in grades 10 and 12 decrease sharply. In the non-target schools, on the other hand, the rates tend to rise steadily over the three-year period.

The higher rates might be attributed to the expanded education and training opportunities for out-of-school youth, many of which were inaugurated in the 1964-65 school year. Despite measures taken to avoid encouraging young people to drop out of school, some of these programs probably attracted a number of students who had been unsuccessful with the regular school curriculum. In the target schools the lower 1965-66 ratios seem more likely a function of increased part-time job opportunities under the Economic Opportunity Act than of the limited services provided under the first few months of the Education Act program.

In any event, there does not appear to be sufficient homogeneity among the data to justify grouping the figures for the three years. Rather, future comparisons should consider differences that are observable from year to year as well as those among grades and types of schools. Composite non-target school rates should be included, especially as senior high school controls.

Conclusions

1. Drop-out rates tend to be highest in the most disadvantaged areas, i.e., the primary target school area. Although no consistent difference is noticeable between the rates of secondary target and control schools, composite target school percentages are consistently higher than those of non-target schools.

2. As one might expect, the drop-out rates for grades ten and eleven are highest. Since no senior high schools are included in the secondary target and control groups, comparisons among PT, ST and C groups cannot be made for these grades. However, a comparison of target and non-target groups shows that senior high school rates tend to rise steadily over the three-year period in non-target schools, while in the target schools they increased for 1964-65 and decreased for 1965-66.

3. Because of these fluctuations the data should be kept separate for the three years rather than combined to form a single baseline.

PART II

PROJECT EVALUATION

EARLY CHILDHOOD EDUCATION

Introduction

This project was initiated to provide experiences to children before they reach the first grade which would enable them to succeed and to adjust better in the elementary grades. Studies by Bloom and others have indicated that the development of children follows a rather stable pattern which reveals that approximately fifty per cent of a child's academic growth is achieved by the time he is in the third grade. If educators are to intervene effectively in a child's development, the implication is to do so at a relatively early age. The project aimed at children who were ages 4, 5, and 6. Some of them had experienced one year of kindergarten and needed additional summer training preparatory to entering grade one. Others had not as yet entered kindergarten and needed further development of social and cognitive skills necessary to take full advantage of the kindergarten experience.

The project consisted of three components each involving selection of staff and children, training programs for all staff members, varied and selected materials and equipment, parent education and involvement and evaluation. These components are as follows: Follow-Up of Operation Head Start 1965, Pre-Kindergarten Centers, and Pre-Grade One Classes.

Objectives. The objectives of the Early Childhood Education project are as follows:

1. To develop a satisfying self-concept.
2. To provide certain nutritional needs and mental and physical health services.
3. To develop cognitive and sensory skills which are assumed to be present by the time children reach the first grade.
4. To increase language facility.
5. To develop listening skills.
6. To develop desirable social skills through experiences in group living.
7. To provide for parent education and increase parent involvement.
8. To develop skills considered necessary for reading readiness.

Project Narrative - Follow-Up Head Start. The major services involved in this component were kindergarten aides and psychiatric, medical, and dental services given to 1800 pupils involved in the 1965 summer Head Start program. The assignment of an aide to kindergarten made it possible for the teacher to devote more time to individual and small groups of children and relieve her from routine tasks. The services of six psychiatric fellows were contracted. Kindergarten teachers were responsible for identifying children who needed psychiatric help. In addition, a psychological examination and social service data, when available, were compiled by the social worker attached to the project. In order that a more definitive record of medical follow-up might be established, health record folders of a special color were used to indicate those children formerly enrolled in Head Start.

Pre-Kindergarten Classes. Several such classes had been in operation under the OEO program and were believed to be so effective that six additional classes serving 120 children under ESEA were established. In February a training program was held for instructors and instructor assistants. Language and concept development comprised the core of the curriculum for pupils. The development of perceptual skills, sensory activities, and field trips was included in the curriculum. Parents were encouraged to participate in the program through classroom visitation, center newsletters, and planned field trips.

Pre-Grade One Classes. These classes provided additional time and experiences during an eight-week summer program for the reinforcement of skills and abilities developed in the kindergarten and introduced other preparatory activities for first grade. While major emphasis was upon language development and reading readiness, attention was given also to the arithmetic and handwriting readiness activities. Thus, the major purpose of pre-grade one classes was to prepare children to read when they entered first grade. Forty classes serving 800 children were established in the primary and secondary target schools. The language program provided the structure for the program and included all types of language experiences: speaking, listening, composing news bulletins and stories, choral speaking, finger plays, and recordings of class experiences.

Evaluation Procedures and Results

The Early Childhood Education project consisted of three rather distinct parts, each dealing with children at a slightly different age, i.e., pre-kindergarten age, kindergarten age, and post-kindergarten age. While certain objectives listed above were common to all components, other objectives were associated with only one or two of the three components. Considerable time was spent in developing instruments thought to measure the kinds of skills and abilities being sought in the various components.

In the Pre-Kindergarten Component the major source of evidence for evaluation was a pre-kindergarten goal card tailor-made by a special committee for use in this project. This goal card consisted of 99 items measuring a number of skills and abilities which were either observed directly or judged by the teachers involved. These 99 items were classified into 13 categories such as physical coordination, relationship of people and things, auditory discrimination, concepts of size, etc. The pre-kindergarten goal card was administered by the classroom teacher in several consecutive sessions on a per pupil basis. The instrument was administered within the first few weeks after the six classes started in February of 1966 and was given again in June, 1966 a month prior to closing of classes. Pre- and post-test measurements on the goal card were appropriate for the measurement of change of project children. No comparison was made of the performance of these youngsters on the goal card in relation to other similar youngsters who were not enrolled in the project. This is a serious limitation in judging project effectiveness. Additional evaluative evidence for the pre-kindergarten component was gained by studying the marks given to these pupils at the end of their first semester in kindergarten.

The evidence used for evaluating the Pre-Grade One Component consisted of two parts; a pre-grade one goal card similar to that described for pre-kindergarten above, and secondly, the results of the Metropolitan Reading Readiness Test. The pre-grade one goal card was administered to 40 classes at the beginning of the summer program in June and was re-administered to 20 classes either six or eight weeks later, depending on the duration of the classes.

Since one of the major services given in the Head Start Follow-Up component was that of providing kindergarten aides, a survey of both aides and teachers was made in May to obtain their views on various values and procedures of the component. A comparison of results on the Metropolitan Reading Readiness Test also was made between former Head Start and non-Head Start pupils in the same set of target schools. These comparisons were made at various percentile points. At the end of the first semester, marks of children in kindergarten who had completed the summer 1965 Head Start program were analyzed and compared to the marks of non-Head Start children in the same school and usually the same classes.

Objective 1. To Develop a Satisfying Self-Concept. No objective measurement or evidence is available to determine whether a "satisfying self-concept" was achieved in any of the three components to this project. It should be pointed out that a statement of this objective assumes that a satisfying self-concept was not prevalent among these disadvantaged children. Rather than being an assumption it should be stated as an hypothesis.

Objective 2. To Provide Certain Nutritional Needs and Mental and Physical Health Services. Relative to nutritional needs, lunches were served in all three components and in addition, snacks were served when the children arrived in the morning. Centralized records of medical services were not kept. The dental program served 520 of 1655 children in this follow-up program.

Objective 3. To Develop Cognitive Skills which are Assumed to be Present by the Time Children Reach the First Grade. Pre-Kindergarten. The results of the total pre-kindergarten goal card are seen in table 16. For comparative purposes, three sets of children were tested with the goal card: ESEA classes which started in February and continued through July; several OEO classes which were in session for a full school year; and also beginning kindergarten children in three typical suburban schools. It should be noted that the suburban kindergarten children were tested in September or approximately three months after the ESEA and OEO children who were tested at the end of June. Thus, comparisons may not be viewed in a consistent manner with respect to age.

For the purposes of this section, parts B, D, E, F, G, H, and I of table 16 are considered some of the cognitive skills which are presumed to be present by the time a child reaches kindergarten. The indices shown in table 17 represent ratios of per cent of correct responses by suburban children to similar per cents for ESEA and OEO classes. When these indices reach 100 or above, it indicates that the performance of the ESEA or OEO classes was equal to or higher than that of the suburban children. Taking the seven subtests as a whole, the increase from pre-test to post-test for the pre-kindergarten ESEA classes ranged from 7% for Identification of Parts of Body (which was very high initially) to a high of 27% for Concepts of Shape. All of these increases were made within a four month period of time. Skill in Counting was least well performed at the pre-test level and continued to be lowest at the post-test level. The area with the lowest index was that of identifying objects in nature where the index was 74.

Pre-Grade One. A second goal card was designed for use in this component. The goal card results are shown in table 17. The sections pertaining to cognitive and sensory skills are sections B, C, F, M, O, P, Q, and R shown in table 17. Subtest F, counting objects and matching the correct number symbol, showed the greatest increase from pre- to post-test in both six(26%) and eight (35%) week classes. The least amount of progress was made in subtests M and Q; recognizing parts of the body and color recognition. The latter is obviously explained by the fact that most pupils could perform the task initially (especially recognizing parts of the body).

Objective 4. To Increase Language Facility. Pre-Kindergarten. Subtest L in table 16 represented an attempt to measure language facility through teacher ratings. Six items were rated on a five-point scale ranging from one (seldom) to five (always). The theoretical midpoint is 3.0. Averaging the pre-test ratings for ESEA classes showed a mean of 2.82 whereas the post-test mean ratings for the same ESEA classes was 3.19; a statistically significant increase of .37.

Pre-Grade One. The approach used to measure language facility in the pre-grade

Table 16. Pre-Kindergarten Goal Card Results for ESEA, OEO, and Suburban Classes.

Tested Qualities and Directions	ESEA Classes(1) Pre-Test Criterion Score Feb., 1966 N=115	ESEA Classes(1) Post-Test Criterion Score June, 1966 N=111	Index(4)	OEO Classes(2) Criterion Score June, 1966 N=76	Index	SUBURBAN Classes(3) Criterion Score Sept., 1966 N=177
Scoring Key: 1 poor; 2 acceptable; 3 exceptional						
A. Physical Coordination: Performance judged by teacher using set criteria.						
1. Throw ball	2.31	2.56		2.83		2.80
2. Bounce ball	2.15	2.45		2.60		2.63
3. Walk balance board	2.32	2.50		2.52		2.52
4. Jump rope	1.56	2.06		1.80		1.50
5. Pedal tricycle	Insufficient data			----		----
6. String beads	2.52	2.94		2.96		2.75
Average	2.17	2.50	102	2.54	104	2.44
Scoring Key: Percent Performing Task Correctly						
B. Identification of People and Things: Pupil asked to point to body or picture and identify:						
7. eyes	92%	100%		99%		98%
8. nose	93	100		100		98
9. head	91	100		100		95
10. ear	93	98		99		99
11. neck	89	96		98		99
12. mouth	96	100		100		99
13. arm	88	100		95		97
14. leg	88	98		100		97
15. hand	87	95		100		97
16. finger	98	100		99		98
17. hair	93	100		99		98
18. foot	89	99		99		96
19. knee	84	93		92		97
Average	91	98	100	98	100	98
20. mother	83	97		96		98
21. sister	85	94		94		97
22. father	89	96		99		98
23. brother	85	98		100		94
24. doll baby	76	90		87		99
Average	84	95	98	95	98	97
25. fireman	48	66		73		89
26. nurse	87	98		100		99
27. farmer	50	57		80		92
28. mailman	40	54		51		60
29. policeman	45	58		62		72
30. doctor	71	76		78		92
Average	57	68	81	74	88	84

(Continued)

Table 16. Pre-Kindergarten Goal Card Results for ESEA, OEO, and Suburban Classes. (Continued)

Tested Qualities and Directions	ESEA Classes(1) Pre-Test Criterion Score Feb., 1966 N=115	ESEA Classes(1) Post-Test Criterion Score June, 1966 N=111	Index(4)	OEO Classes(2) Criterion Score June, 1966 N=76	Index	SUBURBAN Classes(3) Criterion Score Sept., 1966 N=177
B. (Continued)						
31. moon	17	37		37		83
32. stars	35	51		36		77
33. sun	46	60		60		90
34. rain	68	74		88		86
35. snow	54	67		72		73
36. clouds	56	62		70		73
Average	46	59	74	61	76	80
37. grapes	82	97		93		93
38. banana	88	98		99		98
39. apple	84	97		99		98
40. potato	56	74		76		86
41. carrot	68	88		91		95
42. peas	60	86		83		91
Average	73	90	96	90	96	91
43. rabbit	90	99		99		96
44. fish	89	98		96		96
45. turtle	87	98		99		98
46. squirrel	78	98		94		98
47. lion	72	88		94		78
48. elephant	77	92		96		95
Average	82	96	102	97	103	94
49. doll	88	97		99		98
50. ball	55	82		90		76
51. top	64	83		92		94
Average	69	87	98	94	106	89
C. Auditory Discrimination: Teacher names two pictures asks pupil to point to one. (House-Mouse-Point to Mouse)						
52. mouse	95	98		100		98
53. bear	86	98		97		96
54. tomato	66	83		91		82
55. kitten	89	95		97		95
Average	84	94	101	96	103	93
D. Concepts of Size: Teacher has 3 blocks same shape different weight and size.						
56. biggest	76	93		99		99
57. smallest	49	57		68		77
58. lightest	39	27		43		42
59. heaviest	65	82		93		92
Average	57	64	83	75	96	78
E. Concepts of Color: Teacher has 3 color cards. Asks pupil to tell color.						
60. red	70	80		86		91
61. blue	41	60		68		81
62. yellow	32	62		85		84
Average	48	67	79	80	94	85

(Continued)

Table 16. Pre-Kindergarten Goal Card Results for ESEA, OEO, and Suburban Classes. (Continued)

Tested Qualities and Directions	ESEA Classes(1) Pre-Test Criterion Score Feb., 1966 N=115	ESEA Classes(1) Post-Test Criterion Score June, 1966 N=111	Index(4)	OEO Classes(2) Criterion Score June, 1966 N=76	Index	SUBURBAN Classes(3) Criterion Score Sept., 1966 N=177
F. Manipulation of materials: 5 piece gingerbread man.						
63. five piece puzzle	61	94	95	100	101	99
G. Arithmetic Skills: Teacher asks pupil to take a certain number of objects from box.						
64. Count 1-5	57	73		87		76
65. Count 6-10	17	41		39		43
66. Rote count 1-20 (pupil counts aloud)	7	20		17		41
Average	27	45	85	48	91	53
H. Concepts of Location and Space: Teacher asks pupil to point to the picture.						
67. squirrel under board	83	94		97		93
68. airplane in air	69	85		89		84
69. bird out of cage	86	97		97		96
70. boxes that are closed	66	85		89		83
Average	76	90	101	93	104	89
I. Concepts of Shape: Teacher asks pupil to point to the picture of the figure that is the same shape (3 choices).						
71. △	66	90		95		97
72. ○	66	93		97		95
73. ▭	61	91		94		94
Average	64	91	96	95	100	95
J. Listening Skills: Teacher reads sentence asks pupil to point to correct picture.						
74. boy and dog	93	92		96		99
75. girl putting ball in box	69	92		96		92
76. truck stopped at traffic light	47	76		67		80
Average	70	87	97	86	96	90

Scoring Key: 1 seldom; 2 occasionally; 3 usually; 4 frequently; 5 always

Observed Qualities: Teacher evaluates each pupil in the following areas.						
K. Mental Alertness						
77. follows directions	3.26	3.22		3.52		2.87
78. asks questions	2.58	2.97		2.80		2.36
79. listens	2.98	3.28		3.07		2.87
80. attentive	3.03	3.35		3.30		2.90
Average	2.95	3.20	117	3.17	115	2.75

(Continued)

Table 16. Pre-Kindergarten Goal Card Results for ESEA, OEO, and Suburban Classes. (Continued)

Tested Qualities and Directions	ESEA Classes(1) Pre-Test Criterion Score Feb., 1966 N=115	ESEA Classes(1) Post-Test Criterion Score June, 1966 N=111	Index(4)	OEO Classes(2) Criterion Score June, 1966 N=76	Index	SUBURBAN Classes(3) Criterion Score Sept., 1966 N=177
L. Language Ability						
81. speaks clearly	3.08	3.29		3.27		2.89
82. communicates ideas	2.90	3.30		3.20		2.57
83. takes part in discussion	2.73	3.13		2.95		2.37
84. enunciates and pronounces clearly	3.07	3.33		3.15		2.93
85. talks about things he sees	2.58	3.04		3.00		2.32
86. talks about things he does	2.55	3.02		2.98		2.30
Average	2.82	3.19		3.09		2.56
			125		121	
M. Social Awareness						
87. answers to name	3.89	3.93		4.56		4.10
88. calls others by name	2.51	3.67		4:21		2.26
89. knows belongings	3.83	3.90		4.51		3.72
90. likes to help others	2.47	3.11		3.73		2.58
91. can dress himself	3.36	3.75		4.05		3.60
92. liked by peers	2.85	3.14		3.65		2.86
93. leader	1.95	1.81		2.63		1.93
94. follower	2.34	2.53		2.64		2.40
95. "loner"	1.69	1.87		1.83		1.36
96. waits his turn	2.98	3.10		3.40		2.90
97. hesitates to participate	2.02	1.84		1.73		1.91
98. shares toys	2.63	2.94		3.41		2.96
99. assumes responsibility	2.32	3.00		3.03		2.57
Average	2.68	2.97		3.34		2.70
			110		124	

(1) Instructed from February to July but tested in June, one month before classes ended.

(2) Instructed from September 1965 to June 1966 or approximately 10 months.

(3) These pupils were beginning kindergarten pupils in three suburban schools and did not participate in the pre-kindergarten program.

(4) This index is the ratio of the suburban criterion means to the corresponding June means of ESEA or OEO classes, multiplied by 100.

classes was to ask the children to recite their full name, address, and birthdate (subtest L, page 45) and to recite a sentence using three words (subtest N, page 45). As expected, a high percentage of these children were able to recite their names. Recitation of address and particularly date of birth were much more difficult as about 7 out of 10 could perform the former and only 3 out of 10 the latter on the post-test. Constructing a sentence from three words proved to be one of the most difficult subtests. Only 16% of the children could do this on the June pretest. Significant increases were made, however, as 48% of the six week and 36% of the eight week classes performed this task correctly on the post-test. This represents increases of 32% and 20% for six and eight week classes, respectively.

Objective 5. To Develop Listening Skills. Pre-Kindergarten. Two subtests on the goal card (table 16) are pertinent: subtest C (page 40), auditory discrimination; and subtest J (page 41), listening skills. The ability to discriminate between rhyming words was initially high (84%) and post-tested even higher (94%). Subtest J required the pupil to listen to a sentence and point to an object in a picture, to which the sentence refers. Correct responses to this set of items also were very high (about 9 out of 10 pupils on the post-test).

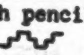
Pre-Grade One. Two subtests on this goal card (table 17) are also pertinent. Subtest G (page 44) asked pupils whether or not two words rhyme and subtest I (page 45) asked pupils to identify beginning sounds of words. In the rhyming test, two nouns with pictures depicting them, were spoken to the child who was asked whether or not they rhymed. Only 53% could identify the rhyming words on the pre-test although post-test results did show high gains in both the six (20%) and eight (27%) week classes. In subtest I (page 45), Recognition of Beginning Sounds, one of the lowest average per cents (13%) was obtained on the pre-test. The six week and eight week classes obtained averages of 34% and 40% on the post-test, increases of 21% and 27%, respectively. Performance was lowest on items 31-33 in which the children had to match the correct printed letter with the correct picture, after the teacher had given the letter and sound orally.

Objective 6. To Develop Desirable Social Skills Through Experience in Group Living. Pre-Kindergarten. In subtest M (page 42), Social Awareness, on the prekindergarten goal card, there were 13 items that could be considered as indicators of a child's degree of social awareness. The teacher was asked to rate the child on these items on a five-point scale ranging from one (seldom) to five (always). The pre-test ratings for ESEA classes showed a mean of 2.68 and a post-test mean rating of 2.97, an increase of .29.

Head Start Follow-Up. Do children who had the benefit of the Head Start program show more progress than non-Head Start children? Children in the summer 1965 Head Start program were followed through the first semester of kindergarten (January 1966). Their report card marks which mainly reflect social skills, were compared with non-Head Start pupils in the same schools. Kindergarten teachers were not informed of the study until after marks were given thus no intentional bias in marking pupils is likely. The marks of 1269 former Head Start pupils and 2068 non-Head Start pupils were compared in each of 17 behavioral areas indicated on the report card. Since pupils are marked S (satisfactory) or N (needs improvement), comparisons of the per cents of S marks were made and tested for significance by chi square. None of the 17 differences between Head Start and non-Head Start pupils was statistically significant. The fact that the marks of summer Head Start pupils were not significantly better than those of non-Head Start pupils should not be construed to mean that the Head Start program was ineffective. Perhaps it is more important to demonstrate that the marks of Head Start pupils were not significantly worse, since Head Start pupils were selected on the basis of their coming from the most economically deprived families.

Objective 7. To Provide for Parent Education and Increase Parent Involvement. A separate Title I project entitled "Parent Education" was devoted to achieving

Table 17. Percents of Correct Item Responses and Increases Made By Six and Eight Week Pre-Grade One Classes on the Pre-Grade One Goal Card.

Tested Qualities and Directions	Pretest Results	Post Test Results		Percent Increase	
	Total Group(1) June 20 N=728	Six Week Classes (2) July 25 N=101	Eight Week Classes (3) August 8 N=193	Six Week Classes	Eight Week Classes
A. Ability to write first and last name:					
1. Name	7%	25%	18%	18%	11%
B. Concepts of Location and Space. Pupil was asked to mark dog who is:					
2. on	55	84	78		
3. over	53	75	81		
4. under	48	73	76		
Average	52	77	78	25	26
C. Classification and grouping of objects: Pupil asked to identify 2 out of 5 pictures.					
5. toys	33	52	67		
6. furniture	47	77	83		
7. fruit	25	40	51		
8. transportation	47	75	88		
Average	38	61	72	23	34
D. Recognition of letters: Pupil asked to find identical letter or fill in missing letter.					
9. d	21	33	33		
10. e	66	78	88		
11. c	6	18	23		
12. g	3	17	13		
Average	24	37	39	13	15
E. Ability to trace pattern: Pupil asked to follow pattern with pencil.					
13. 	41	54	59		
14.	43	58	67		
Average	42	56	63	14	21
F. Count number of objects and match to correct number symbol.					
15. 2	47	74	83		
16. 4	40	68	76		
17. 3	44	68	78		
Average	44	70	79	26	35
G. Recognition of rhyming words (Names of pictures given orally by teacher)					
18. hat - cat	63	90	85		
19. coat - dress	42	54	74		
20. house - mouse	63	86	87		
21. coat - boat	64	81	83		
22. bike - wagon	32	52	69		
Average	53	73	80	20	27
H. Ability to identify and complete a pattern.					
23. △	11	27	30		
24. 000	6	5	24		
25. ◆	25	45	44		
Average	14	26	33	12	19

(Continued)

Table 17. Percents of Correct Item Responses and Increases Made By Six and Eight Week Pre-Grade One Classes on the Pre-Grade One Goal Card. (Continued)

Tested Qualities and Directions	Pretest Results	Post Test Results		Percent Increase	
	Total Group(1) June 20 N=728	Six Week Classes (2) July 25 N=101	Eight Week Classes (3) August 8 N=193	Six Week Classes	Eight Week Classes
I. Recognition of beginning sounds: Circle word having same beginning sound as--					
26. ball	17	43	43		
27. red	22	49	37		
28. car	17	30	44		
Draw line from letter (b) to picture that starts with sound (b)--					
31. ball	8	25	45		
32. top	6	27	35		
33. sun	6	32	33		
Average	13	34	40	21	27
J. Relating picture to written word:					
29. cookies	5	19	30		
30. milk	3	12	20		
Average	4	16	25	12	21
K. Matching number symbol to correct written word:					
34. one	6	32	27		
35. two	4	30	27		
36. three	4	22	26		
Average	5	28	27	23	22
L. Ability to give full name, address, birthday verbally:					
37. name	88	96	97		
38. address	48	73	62		
39. birthday	23	31	31		
Average	53	67	63	14	10
M. Recognition of parts of body: Pupil asked to point to the correct body part.					
40. fingers	98	99	97		
41. elbow	82	93	94		
42. knee	96	99	97		
Average	92	97	96	5	4
N. Ability to make a sentence from three words:					
43. boy, girl, dog	16	48	36	32	20
O. Ability to count objects aloud:					
44. 5	67	81	85		
45. 10	49	68	66		
Average	58	75	76	17	18
P. Ability to count by rote:					
46. 1 to 25	42	59	55	17	13
Q. Recognition of colors: (Teacher shows color cards)					
47. orange	82	88	88		
48. purple	68	72	81		
49. yellow	82	86	88		
Average	77	82	86	5	9
R. Identification of objects by touching and smelling: (Teacher blindfolds child)					
50. feel - apple	87	93	87		
51. feel - sponge	53	69	72		
52. feel - fur	23	38	44		
53. smell - perfume	72	94	84		
54. smell - onion	61	81	75		
55. smell - orange	73	74	81		
Average	62	75	74	13	12

(Continued)

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(1) Total of 40 classes Pre-Grade I starting project June 20, 1966.

(2) Total of 6 classes involved in the project for six weeks ending July 29, 1966.

(3) Total of 14 classes involved in the project for eight weeks ending August 12, 1966.

these goals. The latter project staff worked closely with the Early Childhood Education project staff in identifying and encouraging the parents of children. (See chapter on Parent Education.)

Objective 8. To Develop Skills Considered Necessary for Reading Readiness. Pre-Grade One Component. Six subtests on the pre-grade one goal card can be considered as measuring the development of skill needed for reading readiness. These subtests are: A, writing first and last name; D, recognition of letters; E, ability to trace a pattern; H, ability to identify and complete a pattern; J, relating a picture to the written word; and K, matching number symbol to written word. As a group, these six subtests were difficult in comparison to the remaining 12 subtests. The lowest pre- and post-test performance was on A, J, and K. Gains on all subtests, however, were apparent. For both the six and eight week classes these gains ranged from 11% to 23%.

Table 18 shows the pupils' performance on the Metropolitan Reading Readiness Test, Form A. This test was administered in kindergarten in May, 1966 to most of the children who entered the pre-grade one classes in June. At the close of the six week and eight week classes, six of the classes in the six week course and 14 of the classes in the eight week course (50% random selection of classes) were administered the Metropolitan Reading Readiness Test again. Pupil gains were studied.

Table 18. Pre- and Post-Test Results on the Metropolitan Reading Readiness Test Given to Pre-Grade One Classes in Six and Eight Week Sessions.

	Six Week Classes N=89		Eight Week Classes N=157	
	Raw Score	Percentile	Raw Score	Percentile
Pre-Test (May)	25.93	8	27.56	9
Post-Test				
(July)	34.82	15		
(August)			33.49	14
Gain from May	8.89		5.93	

Table 18 shows pre-test achievement equivalent to under the 10th percentile with respect to national norms. Post-test scores increased significantly to the 15th and 14th percentiles for six and eight week classes, respectively.

Head Start Follow-Up. Pupils who enrolled in the summer 1965 Head Start program were followed through their kindergarten year. In the spring of their kindergarten year, all children are given the Metropolitan Reading Readiness test. It was hypothesized that summer Head Start pupils would perform better on these reading readiness tests than comparable students who had not enrolled in Head Start. Unfortunately, such comparisons could not be made without possible bias since Head Start pupils were selected from among a larger population of pupils and an adequate control group could not be identified. Raw score distributions of Metropolitan Reading Readiness scores were made for 1202 former Head Start pupils and 2045 non-Head Start pupils who were located in the same set of schools in which Head Start centers were located. Comparisons of scores at various percentile points in each distribution were made. These results are shown in table 19.

Table 19. Metropolitan Reading Readiness Raw Scores at Selected Percentile Points for Former Head Start and Non-Head Start Children at the End of their Kindergarten Year.

Percentile Point	Former Head Start Children N=1202 (1)	Non-Head Start Children N=2045 (2)	Difference (1-2) (3)
P_{90}	58.53	60.35	-1.82
P_{75}	51.62	53.06	-1.44
P_{50}	43.29	43.98	-.69
P_{25}	34.11	33.77	+ .34
P_{10}	25.81	24.34	+1.47

Inspection of Table 19 shows that the differences at the five percentile points represent a definite trend of the lower ability pupil being favored by being in the Head Start program. At P50, P75, and P90, the differences show the non-Head Start pupils to be higher than Head Start pupils but again these differences must be attributed to initial superiority of these pupils and not to the non-Head Start program being superior to the Head Start program. Unless one is willing to assume that the lowest 10% of the Head Start group was initially less capable than the non-Head Start group, an assumption which does not seem plausible, it would appear that the Head Start program did result in a higher level of readiness for the lowest 10% of the pupils (difference = +1.47) and to a somewhat less extent for the bottom 25% (difference = +.34). If it were possible to equate the two groups initially or assess the extent of bias, the differences in readiness at all five percentile points *may* have favored Head Start. Based on these data, this issue must be left unresolved.

STAFF LEADERSHIP DEVELOPMENT

Introduction

Teachers, administrators and supervisors who serve central city schools of large metropolitan communities must possess certain specialized knowledge and skills in order to employ the most effective techniques for meeting the educational and developmental needs of disadvantaged children. One of the central tasks in providing more appropriate education for disadvantaged children is to help educational personnel to perceive more clearly the conceptual dimensions of their positions and to develop more effective skills and techniques for carrying out their educational responsibilities.

Objectives. The objectives of the Staff Leadership Development project are as follows:

1. Provide more knowledge which relates to the educational needs of disadvantaged pupils.

2. Achieve more accepting attitudes toward disadvantaged pupils.

Project Narrative. In an effort to achieve the above objectives, two different kinds of activities were initiated: stimulus presentation and staff involvement. These were separate but inextricably related aspects of the total project. In a general way, the basic plan of the project was to provide information to certain members of the professional staff in target schools and then arrange for these persons to interact among themselves and with those who provided the information in such a way that knowledge and attitudes might be modified.

Two university consultants served as advisors to the project committee. Due to the lateness of initiating this project, it was recognized that only the minimal activities could be carried out. One major workshop was planned with the purpose of enlarging conceptual understanding in the area of the impact of poverty on pedagogy. Follow-through of this workshop was also planned for involvement of the target school staffs.

The plan of the workshop encompassed:

a. Presentation to the principals and certain other leaders followed by reactions and questions from a panel consisting of two teachers and a principal.

b. The afternoon of the workshop was spent taping the consultants' presentation and panel reactions and questions for subsequent televised sessions to the entire staffs of the target schools.

Personalized communication of the consultants' presentation to the staffs in such a way that the impact of their message would be felt was a major problem. To accomplish this each target school had identified three key teachers who would work with their principals in communication as well as implementing training plans. A preliminary showing of the televised panel program was offered to these teachers and principals for their preparation for the regular program. At the regular program these teachers were the discussion leaders in their own school groups.

Target schools were then grouped and the principals and key teachers met to exchange their ideas following the regular televised program for all staff members. This was to promote further cross-communication among these schools relative to their reactions and various training plans.

In addition, a number of the target schools involved their key teachers and other members of their staffs in individualized training programs in the school such as: visiting homes with the visiting teachers, staff discussions with the school psychologists, visiting teachers as well as other professional personnel from community agencies.

Evaluation Procedures and Results

Measuring instruments were specially developed or deliberately selected to deal directly with each objective. Only teachers in target schools took any of these tests. Teachers in control schools were not given this battery of tests. The instruments used were: Urban Education Information Test; Teaching Situation Reaction Test; Organizational Climate Description Questionnaire, GNC Educational Views Inventory; and the Adjective Checklist.

There were approximately 1100 teachers involved in both the primary target and secondary target schools. While four of the instruments were given only to one out of three teachers, the sampling was sufficiently randomized to believe that the results would be representative of teachers in the target schools generally. It should be emphasized that, in addition to supplying baseline data, a major purpose of these instruments was to give some direction to the project for future years. Teachers did not identify themselves in taking the tests.

Objective 1. To Provide More Knowledge Which Relates to Educational Needs of Disadvantaged Children. The Urban Education Information Test, as the name implies, was designed to measure knowledge about various aspects of education in an urban setting. The test items were keyed to the results of research studies and as such represent a measure of knowledge of research results in the field. The test was scored in terms of number right. In addition, per cents of correct responses to each item were determined for diagnostic purposes and for future aid in inservice training.

Table 20 shows the mean scores on the test for various groups of professional personnel.

Table 20. Mean Scores of Various Professional Groups on the Urban Education Information Test.

Group	N	Mean	Standard Deviation
Primary target, elementary teachers	295	20.31	4.83
Primary target, secondary teachers	106	20.60	5.45
Secondary target, elementary teachers	392	20.89	4.55
Secondary target, secondary teachers	134	20.13	5.65
Others (blank)	152	19.70	5.72
Administrators, elementary	16	22.50	5.20
Administrators, secondary	15	23.53	4.87
Central office	76	24.33	7.75

It is obvious from Table 20 that teachers tend to score similarly and administrative and central office staff persons tend to score somewhat higher than teachers' groups. An analysis of variance showed no significant difference in mean scores among the teacher groups. Similarly, there was no significant difference among administrative or central office staff. The latter means, however, were significantly higher than the former. There is no reason to expect score differences among teacher groups since all could participate in the training activities.

In order to use test results diagnostically, items were grouped into four rational categories. The average per cents of correct responses to each category were computed. The categories, number of items and average per cent of correct responses are shown below:

Item Category	Number of Items	Average % of Correct Responses
Characteristics of the disadvantaged	5	65%
Social-psychological facts or principles	19	51
Educational or pedagogical knowledge	11	50
Interpreting and understanding tests	5	56

From this type analysis, little difference is noted except in knowledge of characteristics of the disadvantaged child which is appreciably higher than the other categories.

The Teaching Situation Reaction Test (TSRT) was employed to obtain a picture of how teachers cope with certain educational problems within a hypothetical classroom setting. In the writer's opinion the keyed answers depend too much upon situational variables extant in a school system. A "good" response in one school system (or indeed from school to school or teacher to teacher within a system) may be inappropriate in another. Since a knowledge of what the instrument is measuring is lacking, a report of results is superfluous. Whatever the TSRT does measure as reflected by the total score, it did show that various classifications of teachers, whether primary or secondary target, or elementary or secondary teachers, did score approximately the same on an average.

Objective 2. Achieve More Accepting Attitudes Toward Disadvantaged Pupils. To say that teachers should accept the behaviors of children, whether disadvantaged or not, is contradictory to the education process. Education is the business of changing people in desirable ways. Cast in this light, "achieving more accepting attitudes toward disadvantaged pupils" becomes extremely difficult to evaluate for one has trouble in distinguishing between attitudes toward children per se, from attitudes toward their behaviors. One strategy used in evaluating this objective was to ask teachers to select adjectives which they believe best describe the pupils they teach. This approach does not measure acceptance of the child but focuses on his characteristics or behavior. The Adjective Checklist is an instrument containing 48 adjectives which describe social, personal, intellectual, and physical characteristics using positive, neutral, and negative toned adjectives. A random sample of 339 teachers in elementary and secondary level target schools reacted to the checklist by selecting 16 (out of the 48) adjectives which best describe pupils they teach in terms of how they differ from the "average" child.

Six adjectives were selected by 60% or more of the teachers completing the checklist. These adjectives were: "quarrelsome," "unpredictable," "active," "disruptive," "mischievous," and "changeable." The adjectives least selected (10% or less) by teachers to describe their pupils were: "idealistic," "harmonious," "dynamic," "intent," "civil," and "patient."

Further analysis revealed that there was much similarity in responses of elementary and secondary level teachers with two exceptions. Positive adjectives describing intellectual and physical attributes declined significantly from the elementary to the secondary level. Thus, the intellectual attributes of "curiosity," "discernment," "creativity," and "interest" declined in terms of teacher judgment as well as the physical attributes of being "dynamic," "vigorous," and "neat." The decline from elementary to secondary school noted here is corroborated by student ratings of their interest and enjoyment in school.

Most of the adjectives which were selected by teachers were social in nature (38%), followed by personal (32%), physical (32%), and intellectual (25%). One may infer from this that teachers feel that unless children's social needs are met first, their intellectual needs cannot be met satisfactorily.

Whether the teacher's perceptions are accurate or distorted cannot be judged from these data; that is, whether the pupils are actually fundamentally different or whether the teachers have misperceived their pupils cannot be determined. Since such pupil characteristics as those perceived by teachers on this instrument are often stated in the rationale for identifying pupils in need of Education Act services, it seems reasonable to conclude that these perceptions are realistic. Indeed, if these pupils were "intent," "idealistic," "dynamic," etc., it is unlikely that they would be in need of the concentrated services provided by the Education Act.

Another strategy that was used in measuring teacher acceptance of disadvantaged children was based on the rationale that if the school atmosphere in which the teacher taught was satisfactory in various ways that this atmosphere in turn would have an effect on the teacher's acceptance of the child. This strategy recognizes the fact that a teacher is a social being like every other person and the conditions under which he or she works influences the teaching process including the ways in which they interact with children. The Organizational Climate Description Questionnaire, as the name implies, attempts to measure school atmosphere. The OCDQ was completed by 313 teachers from elementary and secondary level target schools. Of the 65 items on the scale, 32 refer specifically to other teachers in the school and 33 refer to the principal or school. The instrument was not scored in the conventional manner but rather responses to individual items were recorded. The teachers rated each item on the OCDQ in terms of their frequency of occurrence. A rating of one indicates "rarely occurs;" two indicates "sometimes occurs;" three indicates "usually occurs;" and four "very frequently occurs." The theoretical midpoint of this intensity scale would be 2.5 with an effective range of from one to four.

Inspection of those items which occured with the highest frequency were positive in tone with respect to either the teacher or the principal. Conversely, those items that projected a negative tone were rated with the least frequency. Some items were neutral in tone. Further examination of the items showed that some were difficult to evaluate in terms of whether or not a high frequency was desirable. Other items were rather clear in their intent and interpretation. An attempt was made to identify the latter type of items. Those items which could clearly be classified as either positive or negative in tone and clearly intended for principal or teacher were grouped. The remaining items were ignored. With each item classified as to positive or negative tone and directed toward principal or teacher, the mean frequency ratings were computed. These are shown in Table 21.

Table 21. Mean Frequency Ratings of Selected Items on the OCDQ Classified by Positive or Negative Tone of Statement and the Group to Whom the Statement Refers.

Group to Whom Statement Refers	Means of Positive Toned Statements	Means of Negative Toned Statements
	Elementary Level Teacher's Mean Ratings	
Principals	2.70 (N=14 items)	2.19 (N=8 items)
Teachers	2.42 (N=10 items)	1.73 (N=10 items)

(Continued)

Table 21. Mean Frequency Ratings of Selected Items on the OCDQ Classified by Positive or Negative Tone of Statement and the Group to Whom the Statement Refers. (Continued)

Group to Whom Statement Refers	Means of Positive Toned Statements	Means of Negative Toned Statements
	Secondary Level Teacher's Mean Ratings*	
Principals	2.72	2.17
Teachers	2.51	1.69

*Items classified same as elementary level teachers.

It is apparent that those items which are positive in tone should show high frequency ratings and those with a negative tone should show a low frequency rating providing, of course, the class of persons being rated are "good" on those characteristics. Table 21 shows that this pattern exists in both the elementary and the secondary levels. In each comparison of item tones for both principals and teachers, the positive toned set of item statements has a significantly higher frequency of occurrence than the negatively toned item statements. At both the elementary and the secondary level the positive toned statements were higher for the principal than for the teacher. Negative toned statements, however, were also higher for the principals than they were for the teachers. In general, there is a striking similarity in corresponding mean scores between the elementary and the secondary teachers.

IN-SERVICE TRAINING

The In-Service Training project was designed to provide specialized preparation for remedial reading teachers and resource center librarians in target schools. This training was provided in the summer of 1966. Because of the nature of this project the only evaluative question that can be answered at this time is whether the specified personnel needs have been met.

Objectives. The major objective of the project was to provide a program to train required personnel for the remediation and enrichment project and the educational resource centers project. This training was aimed at achieving the following goals:

1. To help teachers acquire knowledge and techniques in these two specialized areas.

2. To make the services of these qualified personnel available to children in the primary and secondary target schools.

3. To give children an opportunity to develop the skills and knowledge necessary for academic success.

Project Narrative. Prior to the summer of 1966, a two-day workshop was conducted under the project for twenty-five teachers of remedial reading. In the first and second summer terms special courses in remedial reading instructional techniques were provided by the University of Cincinnati. Tuition and registration fees of approved teachers were to be paid through the Board of Education project funds. Arrangements also were made for reimbursement for the tuition fees of teachers who trained for appointment of teacher-librarians in target schools, up to eight semester hours or twelve quarter hours of credit for basic library courses.

As a result of the project, 24 teachers received at least one term of instruction in remedial reading methods. Ten of these were employed as remedial reading teachers in elementary primary target schools for 1966-67, and one is serving as a volunteer teacher in this area. Two others are teaching Reading Improvement as a part of a secondary school assignment. Another four of the class group have been assigned as resource teachers in primary target schools,, spending approximately half-time with retarded readers. Of the remaining seven teachers who participated in the summer instruction, six are employed in various positions in Cincinnati including Administrative Aide; pre-reading, first and second grade teaching; and secondary assignments in English, and English-Mathematics. All personnel needs for remedial reading teachers in primary target schools have been met.

Under the tuition reimbursement plan 16 teachers took summer courses in librarianship. This group comprises approximately half of the teacher-librarians employed in Cincinnati target schools for the current academic year. Five of the 16 are continuing to take course work. Ten other resource center teachers, not enrolled in the summer term, are currently taking library science courses. Although the reimbursed library science instruction attracted fewer teachers than anticipated, the project has made it possible to secure reasonably well-trained personnel to staff the resource centers.

PARENT EDUCATION

Introduction

The Parent Education project is aimed at securing greater parental involvement in stimulating the physical, cultural, and intellectual growth of disadvantaged children. Project goals are primarily to have the parent realize the importance of his role in rearing his children, to give him the understanding, education and belief in himself to do this and to bring him into closer contact with the school and the education of his children.

The project also attempts to encourage parents and parent figures to continue their own education under such programs as those of the Economic Opportunity Act, the Vocational Education Act, and the Manpower Development and Training Act. Such interest in self-improvement is likely to have a beneficial effect not only on parents and children, but also on the rest of the community.

The attempt to increase the involvement of parents in the education of their children and to encourage their own self-improvement is made chiefly through parent leaders chosen from each school community. The use of residents of each project school area was aimed at bridging the communication gap that often exists between home and school. Chief responsibilities of these leaders are to make home contacts with parents and to work with them in study-discussion meetings. These meetings are devoted to various topics that concern modern family life and education.

Objectives. The project is designed to accomplish the following objectives:

1. To help educationally and culturally disadvantaged children by providing an opportunity for parents and parent figures to secure a better understanding of physical, mental, social and emotional needs of these children.
2. To help these children by aiding parents to understand and accept their role in the children's education.
3. To help these children by involving parents so that they may strengthen their contribution to the education of their children.
4. To achieve for disadvantaged children the kind of parental support and cooperation with the school which will enable them to make maximum progress in learning.
5. To raise the "self-image" of the family and to develop a core of families who will become good examples for children and who will set a tone for continuing education for themselves, their children and other members of the community.

Project Narrative. The Parent Education project was approved February 10, 1966. The many details of inaugurating the project were then begun. Among the first considerations were publicizing the project, establishing an office, requisitioning a secretary and interviewing applicants for the job of parent coordinator to assist the project director.

On the day the project office opened the training program began for 20 parent leaders. The training sessions included samples of programs that parent leaders could use in their study-discussion groups. Books, pamphlets, films, film strips, recordings and resource persons were used to study characteristics of children and their development. Techniques of leadership studies included how to organize a group, how to plan and arrange the meetings, how to involve parents, how to lead discussion, how to publicize a meeting and how to make personal contacts with the parents.

To help parent leaders plan and conduct meetings, committees of leaders-in-training were formed and given the responsibility of developing trial parent study-discussion programs. Understanding of Cincinnati's school programs was developed by the participation in training programs of key school personnel. Qualified community leaders also participated in training, serving as an example of how community people could be used in parent study-discussion meetings. Several community agencies took an active part in working with parent leaders.

Among the other activities included in the training were several cultural and educational trips. These were taken to demonstrate what should be done at the local school level to encourage parents to enrich their own education. These parent leaders also cooperated in the evaluation of the effects of the total Education Act program by administering the Parent Survey.

After the initial training program, in-service training sessions were held to permit parent leaders to discuss their concern, share their ideas, and make suggestions for improving the program. Parent leaders were also invited to attend an early childhood workshop conducted locally by Dr. Martin Deutsch's staff. Some of the parent leaders participated in the workshop for the full two days.

Parent leaders began work in their schools on a half day basis on April 13. Weekly study-discussion meetings were organized and conducted, with a bus tour permitted on one of the meeting days. In all, 231 study-discussion meetings were held. Membership and attendance figures show that the project served a total of 1626 parents, with an average of about 16 attending each meeting.

Evaluation Procedures and Results

Evaluation of the effects of the Parent Education project presents the same difficulties as the appraisal of other specific projects. Since parents served through this project might well have been influenced by other Education Act services provided for their children, it is impossible to attribute gains in parental attitude or understanding to any one project. It is logical, however, that the Parent Education project, since it was aimed at parents, probably contributed more to such improvements than any other single ESEA service.

Some items on the Student Survey and the Teacher Survey, used in ESEA program evaluation, are pertinent to parental relationships with children and with school. Since project services were offered to all target schools (32 of the 40 target public schools actually participated in the first year), the population represented in the surveys is probably essentially the same as that served by this project. In addition to these surveys, membership and attendance figures for the study-discussion meetings, the Parent Participant Survey and oral reports by parent leaders provide relevant information.

Objective 1. To help educationally and culturally disadvantaged children by providing an opportunity for parents and parent figures to secure a better understanding of the physical, mental, social and emotional needs of these children. Success in achieving this objective as well as the other goals of the project is necessarily dependent upon the extent to which parent leaders were able to involve the parents in their areas in study-discussion meetings. Involving 1626 parents, the 231 study-discussion meetings in project schools had an average attendance of about 16. As one might expect, female parent figures out-numbered male by more than eight to one. The average number of meetings attended by each parent was 2.2.

The Parent Participant Survey contains three items that provide some indication to the feelings of parents on this subject. Table 22 presents the results of this survey with items listed in rank order according to percentages of parents answering "very much." The response alternative also include "some and "not at all." When "some" response totals are added to "very much" the combined percentages of affirmative responses total at least 95% for every item in this section of the survey. However, the probability of bias in answering this kind of questionniare should be kept in mind.

Table 22. Per Cents of Parents Answering "Very Much" to Part A of the Parent Participant Survey by Rank Order of Items.

Survey Items	Type of School				
Do you feel these meetings have helped you:	Primary Target Elem. (N=120)*	Primary Target Sec. (N= 34)*	Secondary Target Elem. (N=222)*	Secondary Target Sec. (N= 20)*	Weighted Average Per Cent (N=396)
to know how important you are as a parent	85%	97%	75%	100%	81%
to see how the school is trying to help your child	79	97	72	100	78
to see how the home and school can work together	79	94	72	100	77
to enjoy your child more	79	100	69	100	76
to make it easier to talk with your child's teacher	82	94	63	94	72
to understand children	69	79	63	100	67
to know better how to talk with your child	68	94	57	94	65
to make you feel you are a better parent	63	88	62	100	65
to understand your child's school work	56	81	48	92	55
to be able to help your child with his school work	50	75	41	37	46

* Highest number responding to any single item (some questions were not answered by every parent).

Although over 99 per cent gave an affirmative answer to each of three items related to this objective--i.e., to enjoy your child more; to understand children; and to know better how to talk with your child--these items rank in the middle in terms of "very much" responses. One might conclude that help in understanding children and dealing with them is neither the strongest or the weakest project result perceived by parents.

Objective 2. To help these children by aiding parents to understand and accept their role in the children's education. The Parent Participant Survey also had content relevant to the second objective of this project. Items on understanding children's school work and assisting them with this work were lowest ranked in percentage of "very much" responses. On the other hand, parents evidently felt strongly that they had been helped to see how important their parental role is. This latter item is highest ranked.

The reports of the parent leaders also suggest an improved parent understanding of their role. Chiefly, this gain was indicated for the leaders themselves, but one parent leader reported evident increase in sharing by an area parent in her children's activities.

Objective 3. To help these children by involving parents so that they may strengthen.their contribution to the education of their children. In the leader's reports there were five spontaneous reports of increased parent involvement in the schools. One said that she had succeeded in bringing to school a parent whom even the visiting nurse had not be able to contact.

Section C of the Parent Participation Survey contained four yes-no items related to parental involvement:

1. Have these meetings made you wish your friends were with you?
2. Have you brought a friend to a meeting?
3. Have you talked to friends about these meetings?
4. Have you offered to help at your school?

Responses were strongly affirmative except for the item on whether parents had brought a friend; on this item 58.9 per cent answered negatively. Most importantly, 74.5 per cent of the parents reported that they had offered to help.

Further information pertinent to this objective is available from responses on the Student Survey and the Teacher Survey, used in program evaluation. The Student Survey, for example, asked whether pupils were praised at home for good school work, whether school concerns were discussed at home and whether some member of the family had talked with the child's teacher. Approximately three-fourths of 16,429 target school pupils answered these items affirmatively

Relevant items on the Teacher Survey are especially useful because they offer a unique opportunity to compare January (pre-project) and June (post-project) data. Two of the concept terms rated by teachers are directly related to this objective, and two others have a less essential connection. The concept "Parent Involvement" was rated 2.5 per cent higher in June than in January by target school teachers, but 15.8 per cent lower by control school teachers. The ratings given "Parent Participation in School," "School's Attempt to Reach Parents," and "Supportive Attitude of Parents" were lower in June by both groups of teachers, but the decrease averaged 16.3 per cent for the control group and only 2.7 per cent for target teachers. Interestingly, primary target teachers gave all four items higher ratings in June than in January.

Of these differences, only those in the ratings of "Parent Involvement" seem great enough to justify concluding that target teachers saw an improvement in parent-school relations. The suggestion in all related items, however, is favorable in evaluating this aspect of project effectiveness

Objective 4. To achieve for disadvantaged children the kind of parental support and cooperation with the school which will enable them to make maximum progress in learning. The favorable indications in the comparative ratings given "Supportive Attitude of Parents," are reinforced by other available evidence. First, a number of parent leaders felt that their visits to homes and the study-discussion meetings had promoted parental support and cooperation with the school. Six of the open comments by parent leaders specified improved understanding, communication, or interest. Three leaders reported that their efforts in the project seemed to have had a positive effect on the local unit of the P.T.A. Two others said that they had been influential in keeping potential drop-outs in school.

The Parent Participant Survey results contribute further evidence that this fourth objective was successfully achieved. Items on seeing how the school helps the child ("very much" 78%), seeing how home and school can work together ("very much" 77%) and making it easier to talk with teachers ("very much" 72%), all rank up near the top.

Objective 5. To raise the "Self-Image" of the family and to develop a core of families who will become good examples for children and who will set a tone for continuing education for themselves, their children, and other members of the community. Consistently among the most difficult objectives to evaluate is the goal in improved self-image. Questions were included in the Parent Participant Survey to find out how the meetings had influenced the way the parents felt about themselves and their further education. In Part A parents were asked whether they now felt that they were better parents as a results of the meetings. Affirmative responses for this item totaled 98 per cent, with 65 per cent answering "very much." In Part C 88.0 per cent indicated that the meetings had motivated them to continue their own education.

Specific instances of parents who had been prompted to further their education were reported by eight of the parent leaders. Three leaders spoke of improved personal habits in the families in their area. A larger number said that they themselves had a better feeling about their job as a parent.

SATURDAY ENRICHMENT

Introduction

The Saturday Enrichment project is designed to enrich the educational experience of fifth and sixth grade children in target area schools through small classes and individualized instruction. Although the project is an addition to the regular school curriculum, it attempts to supplement and further the same goals as the regular program.

While the pupils selected for this project represent the top ten per cent in their school, it is nevertheless believed that this project has a sound rationale in keeping with the Education Act. First, it is reasoned that since these pupils do come from disadvantaged environments they probably have a potential which surpasses that which they are currently showing, even though their achievement may be higher than that of other pupils in the school. Secondly, many citizens feel that these pupils are future leaders and their potential should be developed on a high priority basis. Thirdly, this project represents only a very small proportion of the Education Act program in Cincinnati and gives the program a scope that it would not have otherwise.

Objectives. In the original planning, five overall objectives were designated:

1. To strengthen the child's self-image, through the use of the skills he possesses.

2. To build and reinforce interests so that the child can work more effectively in his regular day school setting.

3. To stimulate the child to do work creatively in the areas of interest such as art, drama, literature, mathematics, music, science, etc.

4. To offer each child an additional opportunity to work in an environment that is conducive to strengthening values.

5. To provide opportunities for good working relationships between parents and school through parent meetings and participation.

Project Narrative. Project implementation began on Saturday, February 2, 1966, with an orientation meeting held for eight coordinators, 48 teachers and 14 volunteers. The sessions for the pupils began Saturday, February 9, 1966, and continued for seven consecutive Saturdays, ending with a culminating program for parents on April 2, 1966. Although 805 fifth and sixth grade able learners from 29 public and 14 non-public feeder schools were enrolled in their eight centers, the average attendance per Saturday was 703.

Classes were organized according to the areas of interest which boys and girls indicated on pupil interest inventories administered prior to the start of the program. These classes emphasized the practical and the academic aspects of science, mathematics, dramatics, reading and social studies. Resource teachers were assigned to provide enriching activities as the interests of the children demanded within the framework of the teachers' abilities. Volunteers assisted teachers by working with small groups of children.

Evaluation Procedures and Results

Nine instruments were designed to yield evaluative data for the project: Pupil Interest Inventory, Parent Survey, Pupil Questionnaire, Volunteer Questionnaire, Teacher Questionnaire, Parent Questionnaire, Pupil Survey, Pupil

Record and Coordinator Report. The first two of these forms were completed at the start of the project, the other seven near the end. In addition to data concerning the five main objectives, the evaluation forms yielded broad general information about procedural considerations for more effective operation of the project and overall project evaluation. Such procedural material has been omitted from this condensed report.

Objective 1. To strengthen the child's self-image, through the use of the skills he possesses. On the Saturday Enrichment forms only one evaluative item was related to this goal. In item 6 of the Pupil Questionnaire, pupils were asked whether the Saturday morning classes had helped them in their regular classes. Of 651 pupils responding, 549 (84.3%) answered yes.

Objective 2. To build and reinforce interests so that the child can work more effectively in his regular class setting. The improvement in school work noted by pupils themselves was confirmed by parents, with 92.6 per cent of the sample in the Parent Survey reporting that their children had improved. Table 23 shows the percentage of students in a random sample whose marks in each of five subject areas increased, decreased and remained the same. If one assumes that variation in grades due to chance factors would be equal in positive and negative directions, the actual improvement in grades is significant.*

Attendance figures suggest an increase of absence in the third period, but this difference is not statistically significant. In the random sample of pupils for whom the pupil survey was completed, those having no absence for the report period decreased from 43.5 per cent in the second period to 36.2 per cent in their third period. Total number of days present showed a comparably non-significant decrease. These may be chance differences or they may be attributable to other causes such as weather, etc.

Whatever the cause of difference in grades and attendance there can be no doubt that parents believed their children were helped by the Saturday classes. Of 658 parents responding to the item on how children had been helped, 619 (94.1%) indicated that some help was recognized; 164 parents felt that the Saturday classes had improved their children's regular school work; 270 said their children were more interested in school subjects; and 185 indicated that their children had worked on enrichment projects at home. Only 39 parents marked the fourth alternative, "has shown no difference."

Parents were also asked to rate the interest of their children in the Saturday classes. Of 318 parents responding to this item, 299 (94.0%) rated the interest level favorable ("definitely interested," "interested most of the time," or "strongly interested."). Fourteen parents rated their children "mildly interested," and only five indicated a low interest level. In evaluating the above parent responses, one should note that only 38.9 per cent of the parents to whom questionnaires were distributed responded to the item on interest rating while 80.4 percent answered the question on how their children had been helped.

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*In subjects taken in the enrichment program the difference is significant beyond the .02 level of confidence (chi square=5.68); for non-enrichment subjects, beyond the .05 level (chi square =4.08); and for the overall difference, beyond the .01 level (chi square=9.28).

Table 23. Summary Analysis of Sample of Enrichment Pupils' Regular Day School Marks.

	Arith.	Lang.	Reading	Science	Social Studies	TOTAL
Percentage of report card marks in Subjects taken in enrichment program which:						
Increased	16.9	17.9	12.9	29.4	27.5	21.3
Decreased	14.3	10.7	9.7	13.2	15.0	12.9
Remained Same	68.8	71.4	77.4	57.4	57.5	65.8
(N) =	(77)	(56)	(31)	(68)	(40)	(272)
Percentage of report card marks in Subjects not taken in enrichment program which:						
Increased	23.4	16.1	18.4	27.3	23.6	21.4
Decreased	14.1	14.9	11.4	29.8	17.9	15.6
Remained Same	62.5	69.0	70.2	51.9	58.5	63.0
(N) =	(64)	(87)	(114)	(77)	(106)	(448)
Percentage of total marks in subjects taken or not taken which:						
Increased	19.9	16.8	17.3	28.3	24.7	21.4
Decreased	14.2	13.3	11.0	17.2	17.1	14.6
Remained Same	65.9	69.9	71.7	54.5	58.2	64.0
(N) =	(141)	(143)	(145)	(145)	(146)	(720)

Objective 3. To stimulate the child to work creatively in the areas of interest such as art, drama, literature, mathematics, music, science, etc. The findings reported above suggest the program had a measure of success in the eyes of pupils and parents. Pupils judged that they had been helped, and parents felt that their children were both aided by the classes and interested in them.

Certainly the assignment of pupils to specific subjects had a great effect on this important factor of interest. Although the program's third objective concerned creative activities in interest fields, no estimate nor indication of the quality of creativity was provided by the evaluation forms. One may say, however, that a prerequisite to attaining this objective was assignment to subjects in which pupils indicated a degree of interest.

Objective 4. To offer each child an additional opportunity to work in an environment that is conducive to strengthening values. The concept of pupil values covers an extremely broad range. It is impossible to evaluate the effects of any program on this complete gamut. On the Pupil Record, enrichment pupils were rated by the enrichment and regular teachers on six personality factors: influence and leadership, responsibility, confidence, participation, industry and quality of work. In general these ratings showed a marked consistency, with the average rating falling, as expected, slightly above the mid-point of the scale. However, all teachers tended to rate pupils lower on work quality than on the other five characteristics. This tendency may be traceable to higher expectations on the teachers' part for this select group of students.

Objective 5. To provide opportunities for good working relationships between parents and school through parent meetings and participation. Favorable parent reaction to both the Saturday Enrichment project and to the total Education Act program would normally be expected to enhance parent association with the school. Unfortunately little evidence is available to determine the extent to which sympathy with the schools' objectives translated into improved practical school relationships among parents of Saturday Enrichment pupils.

It is possible, however, to compare the percentage of returns on the two parent forms, one distributed at the start of the program and one at the conclusion. In doing so one finds little difference, despite the fact that an effort was made to improve the method of distribution on the second form. The Parent Survey form, distributed at the start of the program, was returned by 53.7 per cent of the parents, while the concluding Parent Questionnaire was returned by 50.6 per cent. There might have been a stronger motivation to return the first form since some parents might have felt that failure to do so would hinder their children's opportunity in the program.

PHYSICAL HEALTH SERVICES

Introduction

The Physical Health Services project attempted to augment health services in all target schools by providing additional medical personnel and necessary supplies and equipment. This added service was not expected only to provide early identification and treatment of health problems, but also to promote desirable changes in personal health habits of pupils and their families.

The conditions that exist in many homes, particularly in deprived areas, are conducive to illness. Improper food care, unsanitary toilet conditions and poor heating and ventilation give rise to various types of health problems, which are detrimental to educational achievement.

Objectives. The health services provided by this project were designed to achieve the following objectives:

1. To appraise the physical health status of pupils in the target disadvantaged areas of the city through expanded examinations and screening procedures.

2. To counsel pupils, parents and school personnel concerning appraisal findings.

3. To make appropriate referrals for the evaluation and/or correction of defects.

4. To provide kindergarten, first and second grade pupils with immunization protection against measles.

5. To provide emergency service for injury and sudden illness.

6. To endeavor to bring pupils to optimum health status that they may have a richer experience in all educational opportunities.

Project Narrative. Prior to approval of this project, the additional amounts of professional time needed to administer adequate health services to the target schools were estimated. Because these services in the Cincinnati schools are administered under the Cincinnati Board of Health, this group provided the estimate of time needed in each of the primary target and secondary target schools for nursing services and medical services of a physician.

Unfortunately, however, the shortage of medical personnel was found to be even more severe than anticipated, thus making it impossible to increase health services in target schools to the extent initially proposed. All available professional service was contacted including additional time of Board of Health physicians and part-time services of eight registered nurses and twelve licensed practical nurses. The project also employed 15 clerks to keep records and perform other clerical duties. Where available, volunteer service was used for more routine tasks, but the hours of such service totaled less than 100 through the complete four months of the project.

The first phase of service under the project was a physical examination provided for all pupils in target school areas in grades four, seven and ten. All other target school pupils referred by members of the professional staff were similarly examined. In addition to this a considerable number of physical examinations were given to determine fitness for participation in sports.

With each physical examination, thorough health records were completed and those for pupils needing additional attention were tabbed. Pupils who were examined were given appropriate immunization shots for diphtheria, pertussis, tetanus, smallpox or polio. In those target schools with primary grades, measles vaccine was available to any pupil who had not previously received it or who had not had measles. About 10,000 doses of this vaccine were administered.

The second phase of project services consisted of follow-up of those pupils whose records had been tabbed at the time of examination. Referrals, usually to clinics of the Public Health Department, were made for these pupils. Where clinical attention seemed necessary, an attempt was made through home visiting to induce parents to provide necessary care. The referrals that were then returned to the school were checked by the nurse to insure that appropriate action had been taken. Project personnel also gave lectures to groups of pupils and parents.

Evaluation Procedures and Results

Records kept in target schools in March through June of the first project year indicate both the number of cases receiving each kind of health service and the conditions of illness discovered in the screenings and examinations. These records thus provide a basis for evaluating the procedural objectives that constitute the bulk of the projects' goals and also furnish baseline data for future appraisal of project success in achieving the long-range objective of optimum pupil health.

Objective 1. To appraise the physical health status of pupils in target disadvantaged areas of the city through expanded examinations and screening procedures. The expansion of the physical examination service for project schools is described above. A comparison of the number of examinations and screenings in target schools in March through June, 1965 and 1966 is shown in Table 24.

Table 24. Numbers of Examinations and Screenings Conducted by Health Department Personnel in Target Schools, March through June, 1965 and 1966.

Service	1965	1966
General Physical Examination, Grades 4, 7, 10	2289	4423
General Physical Examination, Referred by Teacher	2	136
Athletic Examination	1742	2061
Tuberculin Testing	139	898
Vision Testing	2644	4981
Hearing Testing	306	29
Other screening	1180	1651
TOTAL	8302	14179

The data show increases for all categories of service except hearing testing. Delays in securing audiometric equipment and in training personnel to use it limited the number of hearing tests under the project. The number of pupils given physical examinations nearly doubled, and the total cases examined or screened rose from 8302 to 14,179 in 1966. In terms of average daily membership of target schools, this represents an increase from 26.3 to 44.8 examinations or screenings per 100 pupils. Particularly striking is the teacher response in referring pupils for special physical examination. This figure increased from two in 1965 to 136 in 1966.

Parents of pupils in grades four, seven and ten were permitted to indicate a preference that the physical examinations be conducted by their private physician. In the months of project service, 102 parents in the target schools submitted evidence of such physical examination. This compared with 92 such cases in 1965.

Objective 2. To counsel pupils, parents and school personnel concerning appraisal findings. Adequate follow-up of the physical examinations and screenings conducted under the project required that parents be advised of the outcomes of these examinations. In many cases detailed interpretation was required either to explain what future attention was advisable or to help parents understand the need for improving personal conditions related to health.

To accomplish this goal, both nurses and physicians employed under the project made a concentrated effort to arrange conferences, many of which involved school personnel and the parents of the younsters who needed attention. In sharp contrast to the 80 cases in which such conferences were reported in the final months of the 1964-65 school year, project records for the months March through June, 1966, show that 943 conferences were held. For many of these, both nurse and physician were present. In 772 cases, contact was established between the nurse and the parents. School physicians reported 71 such contacts.

To promote better communication between medical personnel and parents, the nurses tried to allot about a third of their time in each school to making home visits. Going to the home also facilitated more accurate diagnosis of some of the causes of the health problems of youngsters. Wherever unsanitary conditions were found or other evidence of poor health habits seemed indicated, the nurses counseled with the parents concerning the dangers of such practices. A total of 568 such home visits were recorded. Although the limited records of similar counseling efforts in the preceding school year are not considered reliable, nurses and physicians, had little opportunity to engage in conference prior to the project.

Objective 3. To make appropriate referrals for the evaluations and/or corrections of defects. Another essential part of the contact of medical personnel with parents was recommending means of further diagnosis or treatment of health problems. For cases serious enough to require further attention, nurses or physicians would make appropriate referrals, usually to public health clinics. Where appropriate, project personnel also scheduled appointments for pupils and followed through to insure that these appointments were kept. However, no record was kept of these referrals.

Objective 4. To provide kindergarten, first and second grade pupils with immunization protection against measles. Because measles is an extremely common disease, which not only causes pupils to be absent from school but also very often leads to complications, the project provided for any pupil in kindergarten grade one or two who had not previously been immunized or had not had measles to have this vaccine. A total of about 10,000 doses were given to target school pupils. This represents 86.7 per cent of the average daily membership of these early grades.

Objective 5. To provide emergency service for injury or sudden illness. Although the need for first aid service for injury or sudden illness exists in every school; the problem is believed most acute in disadvantaged area schools.

In cases where a pupil is struck by injury or illness in a school, his teacher normally will make a referral on a standard form to any medical person who happens to be on duty. Accurate records of these referrals are maintained as a matter of routine. Table 25 compares the number of such teachers' referrals in each project month of 1966 with that for the preceding year. It also shows the total number of pupils seen for sudden illness or injury by the school nurse or doctor.

Table 25. Referral and Disposition of Pupils Seen in Target Schools by Health Department Personnel for Injury or Sudden Illness, March through June, 1965 and 1966.

	1965					1966				
	March	April	May	June	Total	March	April	May	June	Total
Pupils Referred by Teacher	4994	3924	3328	1715	13,961	3834	3793	3975	2088	13,690
Pupils Seen by Nurse	4955	4317	3365	1792	14,429	3837	4133	4078	2140	14,188
Pupils Seen by Physician	1139	938	574	102	2,753	573	644	564	304	2,085
Pupils Given First Aid	1154	876	973	439	3,442	739	793	1033	634	3,199
Pupils for Whom Exclusion from School was Recommended	883	656	521	202	2,262	545	543	653	285	2,026

The totals in Table 25 show a slight decrease from 1965 to 1966 in all categories of pupils seen for injury or sudden illness. This fact might suggest the conclusion that emphasis on health in the target schools led to a decrease in the number of health problems requiring immediate attention. Such a deduction seems unwarranted, however, when the monthly data are considered. Whereas in 1965 the figures tended to decrease steadily from March to June, the 1966 figures tended to increase through May. In other words, as the project progressed, and more emphasis was placed on physical health in the target schools, the number of pupils coming to the nurse and physician grew larger. The smaller June figures are explained, of course, by the fact that school was in session for only part of the month.

Such an increase in the number of pupils served may be viewed as one of the key goals of the project. The discussion above, however, reflects one of the chief difficulties in appraising project success. Every case of illness recorded is both a positive and a negative statistic. To detect illness where it exists is certainly a desirable outcome of intensified health services. However, in the long run, a decrease in the number of cases of illness is the main indication of whether the project has been successful.

Objective 6. To endeavor to bring pupils to optimum health status so they may have a richer experience in all educational opportunities. This final objective specified the single ultimate goal of the Physical Health Services project and that of all other school provisions related to pupil health. However, one can hardly expect much progress toward the ultimate goal in a few months' time. Thus, a reasonable approach at this time would seem to be to establish a baseline of physical health conditions with which future findings can be compared.

Medical records kept under the project together with those for the preceding year provide a thorough indication of the types of physical disorders detected among target children. The number of cases of various ailments found in March through June of 1965-1966 are shown in Table 26. Although the figures for the two years are compared, it should be remembered that the goal is to establish a baseline and not to draw any conclusions about the relative status of pupil health in the two years.

It will be noted that there was an increase from 5977 in 1965 to 6210 in the number of ailments detected. These figures represent an increase from 15.0 per cent of average daily membership to 15.6 per cent. In relationship to the number of cases examined or screened, however, (see Table 24) the figures represent a decrease from 72.0 per cent in 1965 to 43.8 per cent in 1966. In other words, an increase of 5877 examinations or screenings turned up 233 more instances of physical ailments.

Table 26. Cases of Physical Ailments Detected in Target Schools by Type, March through June, 1965 and 1966.

Conditions	1965	1966
Malnutrition	42	33
Obesity	113	69
Skin Diseases	719	597
Defective Vision	715	1035
Disease of Eyes	202	211
Defective Hearing	78	13
Disease of Ears	105	139
Dental Defects	1096	1306
Tonsils (enlarged)	455	504
Functional heart conditions	91	192
Organic heart conditions	9	14
Respiratory Ailment (colds)	1069	1286
Chest Deformities	4	23
Orthopedic Defects	148	129
Genito-Urinary Defects	39	35
Speech Defects	12	15
Nervous Disorders	132	90
Miscellaneous	948	407
Glands (enlarged)	*	112
TOTAL	5977	6210

*No record kept.

In both periods of time reflected by the data in Table 26, dental defects were the most common defect or condition while respiratory ailments ranked a close second. Other ailments found with some frequency included defective vision, various skin diseases and enlarged tonsils. Presumably the decrease in the "Miscellaneous" category is traceable to more definitive classification in 1966. The category of "Enlarged Glands" for example, was not maintained in 1965.

EDUCATIONAL RESOURCE CENTERS

Introduction

The Educational Resource Centers project was initiated in the target elementary schools in the Cincinnati Public School system to fill a long-recognized need for learning and resource facilities. Such centers are seen as an important supplement to the instructional program. They also play a vital role in supplying books and materials needed to implement other Cincinnati projects under the Education Act.

Among the 32 target elementary public schools, only seven had libraries at the time the project was initiated. Book collections in these libraries were inadequate, and scarcely any other instructional resources were included. To remedy this condition, the Educational Resource Centers project aimed to provide learning centers for 25 target elementary schools without libraries and to upgrade the facilities in the other seven schools.

Objectives. The instructional objectives of the Educational Resource Centers project are as follows:

1. To improve reading skills both within and outside of the framework of the regular reading program.
2. To augment the supply of diversified reading and audio-visual materials requested by other projects.
3. To aid the teachers in individualizing instruction for school children who have special needs by supplying additional appropriate materials.
4. To teach use of library tools, materials and other instructional media to pupils and also to teachers.
5. To satisfy children's natural and spontaneous curiosity.
6. To arouse latent interests and stimulate creative thinking.
7. To guide children in their selection and evaluation of information sources and so help them to develop skill in making choices and in using these sources.
8. To teach appreciation of books, records and educational films as a resource for personal enrichment and advancement.
9. To encourage the library habit as a wholesome recreational activity.
10. To provide a place in which pupils may work independently on activities planned to meet their particular needs, with emphasis on programed instructional learning.
11. To provide an additional setting for practice in self-discipline and social responsibility.
12. To involve parents in whatever ways may be possible which will promote a concern in the education of their children.

Project Narrative. Planning for the Educational Resource Centers project began in May, 1965. Time schedules and budgets were prepared for developing new centers and supplementing those already in existence. Twelve major lists of books were prepared by the Supervisor of Library Services with the assistance of librarians and elementary subject area supervisors. The goal set for every center was a minimum of 3,500 books, with ten schools having the largest enrollments receiving more. When the project was approved, a total of 143,000 books were obtained. Subscriptions were placed for 33 periodicals for each project school. In addition, orders were placed for 17,000 audio-visual and 6,000 programed learning materials. Rooms for the centers had been selected prior to project approval. Now design services were contracted for, plans were drawn and bids for remodeling and construction were let. Work began in July.

Equipment bids were also taken. Supplies, specified by the supervisor of Library Services, were also ordered immediately on approval of the project.

Seven professional and eleven clerical employees were hired for project administration. Additional personnel was pro-rated over several projects for business and personnel administration and for evaluation. To staff the new centers, the goal was to employ either librarians with elementary school experience or successful teachers who were willing to commit themselves to library science training. In-service training opportunities were provided under another project.

Evaluation Procedures and Results

Because of the time necessary to implement the Educational Resource Centers project, no extensive evaluation of the first year's efforts is possible. Since the project was dependent upon special materials that had to be ordered and facilities that had to be modified, the few months that remained after project approval were barely enough to take the initial steps toward implementation.

This difficulty was anticipated at the time the project was planned. The initial strategy for evaluating the project called for the establishment of baseline data through a teacher survey, a pupil survey, and a library skills test. In addition, after the project was past the implementation stage, records were to be kept of the use of books and materials.

Only a limited number of these data are available. This evaluation will report such baseline data and attempt further to determine whether the project services, as they are now being implemented, answer a definite need of target pupils and teachers.

The objectives of this project are numerous and somewhat elusive of measurement. For this reason, they are grouped in this report into three categories: procedural; long range, pupil centered; and long range, library centered. The focus of the evaluation will be reporting available baseline data and assessing the suitability of the project services to pupil needs.

Procedural Objectives. Four of the project objectives are procedural in nature. These are concerned with augmenting the supply of materials for other projects, supplying materials for individualized instruction, furnishing a place for independent study, and providing a setting for practice in self discipline and social responsibility.

Riessman, among others, has underlined the importance of helping the disadvantaged children participate actively in the learning situation by providing clues that are "salient and concrete."[1] Such clues are woefully lacking in traditional middle-class-oriented learning materials. Just as obvious is the need for a place to study. Most disadvantaged youngsters have no suitable study area in their homes. If their educational growth is not to be restricted to the classroom, they must be provided an adequate place to engage in independent study. From this study they might also derive other gains such as improved self discipline and sense of social responsibility.

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[1] Frank Riessman. The Culturally Deprived Child. New York: Harper & Row, 1962, p.131.

Of the two kinds of provisions--materials and setting--teachers seem to feel that a suitable place for learning is more important. This fact is evidenced by their replies to pertinent items of the Teacher Survey (see Table 1, page 5). The two items rated "low" (poorly) were Adequacy of School Library and Time and Place for Pupils to Study. Items dealing with adequacy of materials such as books and instructional media were rated much higher. From this it is inferred that teachers are more concerned with the former than the latter.

Long Range Objectives, Pupil Centered. Four project objectives concerned matters directly related to the performance of pupils. These involve improving reading skills, satisfying children's curiosity, stimulating creative thinking and involving parents in the education of their children.

The need to improve the reading skills of target pupils is evident in the scores on the achievement tests administered for the evaluation of the Education Act program. Median scores on the subtests concerned with reading, word meaning, and paragraph meaning were rather consistently below the battery median score at all grade levels with deviations from the norm ranging from seven months at grade two to two years at grade six. Such deficiency in reading ability is a commonly recognized characteristic of culturally deprived pupils.

Seven concepts related to this phase of project services were included as items on the Teacher Survey. These concepts, shown in Table 1, page 5, were: Parent Involvement (item 2), Pupil Motivation (item 3), Parent Participation (item 17), Supportive Attitude of Parents (item 21), Behavior Standards of my Pupils (item 22), Pupil Discipline (item 23) and Achievement of my Pupils (item 38). The mean ratings for the seven items on long range objectives are lower than for the procedural items discussed above. It would seem that the teachers feel a greater need to improve important aspects of pupil and parent behavior than to work toward the more easily attained procedural goals. This seems consistent with the teacher's role which is concerned far more with influencing behavior than with making provisions.

Comparisons can be made also between these target school teachers' ratings and those given by non-target teachers throughout the city. When these ratings on the seven behavioral items are compared, all non-target ratings are seen to be considerably higher. This difference, averaging over a full unit on a seven point scale, is much greater for the behavioral than for the procedural items. These comparisons point to the feeling that teachers evidently have concerning the importance of these goals for the resource centers project.

Long Range Objectives, Library Centered. The remaining four project objectives are concerned with goals related directly to the services offered by school libraries. These objectives involve the use of library materials, the selection and evaluation of information sources, appraisal of books and other educational media and encouragement of the library habit.

Although these objectives are necessarily related to the other project goals, they are treated separately too because of their immediate connection to project services. These are the characteristics for which change will be measured in the coming year through the use of the library skills test. At the present time, only two questions from the survey administered to pupils provide information pertinent to these objectives. On the Student Survey administered in May, pupils were asked, "Do you read books from the library?" and "Do you read more than is required by your school work?" There was little difference among percentages of replies by target and control pupils to these questions. About 85 per cent of the persons in each type of school said that they did read library books, while the percentage answering the second question affirmatively was about 59 per cent. The item on the library books rates in the upper half of the survey in per cent of affirmative responses. The question about extra reading, however, ranks second from the bottom. This seems to suggest that pupils' use of the library has been limited to required reading.

EMOTIONAL AND LEARNING PROBLEMS

Introduction

This project was designed to serve the special educational needs of two distinct groups of children; (1) those whose full participation in the educational process is hampered by existing emotional problems, and (2) those with perceptual learning disabilities that interfere with academic achievement. Several local studies have indicated that teachers see the special needs of these pupils, especially the emotionally disturbed, as urgent concerns.

The project was approved late in the 1965-66 school year. The highly experimental nature of the project services necessitated gradual movement toward the long-range objectives. At this time, therefore, the evaluation must be limited to a judgment as to whether sufficient progress has been made.

Objectives. The goals specified for the project were as follows:

1. To provide adequate educational opportunities for children who might otherwise be denied the privilege of school attendance because of their emotional or learning disabilities.
2. To prevent the deterioration of the learning process of children with emotional or learning disabilities.
3. To rehabilitate children who have emotional or learning problems.
4. To demonstrate the effectiveness of a special educational program in a public school to enable certain children to function outside the confines of a residential institution such as a hospital.
5. To provide opportunities for the re-entry of children from institutional settings into the community through modified classroom programs.
6. To provide opportunities for teachers, psychologists, psychiatrists, and others to extend their skills and understandings of children with emotional or learning disabilities.
7. To provide facilities for training teachers to work with children who have emotional or learning disabilities in a day school setting.

Project Narrative. In the first months of the project, securing and training competent personnel was a primary concern. Elementary teachers who chose to work with emotionally disturbed children were released from their regular assignments once a week to participate in special courses. These were conducted at the Child Guidance Home and at Longview State Hospital. To prepare teachers to work with the perceptually handicapped a three-week summer workshop was held.

Employing the administrative and clinical personnel for the project was particularly difficult. An educational coordinator was hired after considerable searching but it proved impossible to fill the proposed clinical team positions of psychiatrist, psychiatric and school social workers and psychologists.

Because of the limitations imposed by lack of clinical personnel, project activities for the first year were restricted to two experimental classes for the emotionally disturbed. These classes met for seven weeks and served a total of 12 very carefully screened pupils. At the end of the school year each pupil was appraised to determine his best placement for the following academic year.

Although the experimental nature of the project justifies a gradual approach and delays may be accounted for by lack of competent personnel, the importance of the services proposed seems to demand expediting services for both the emotionally disturbed and the perceptually handicapped.

SPEECH IMPROVEMENT

Introduction

The speech patterns of many target school children are substandard when compared with the speech standards set by society-at-large. When these pupils move from their immediate environment into the larger community, their speech sets them aside as being different and often limits their opportunities. This project was aimed at improving these speech patterns and the language skills of target school teachers.

Objectives. The project objectives were as follows:

1. Determine the nature of and the extent to which substandard speech is used in selected disadvantaged schools.

2. Institute programs designed to remediate the substandard speech patterns of the children, teachers and parents involved.

3. Evaluate the effectiveness of the remedial speech program.

Project Narrative. The Speech Improvement Program began on February 8, 1966 with the employment of a project director and a speech consultant. Six primary target elementary schools were identified to participate in the program.

Numerous tape recordings were made and evaluated of the oral language of children and teachers in the six target schools, to identify characteristic language errors in these schools. In addition to providing a basis for lesson planning, these recordings also served as a mean of selecting pupils for small group instruction and as a pretest for evaluation purposes.

While lesson plans were being written for the small classes, a series of four after-school teacher workshops were begun by the project's university consultant. The first and third were joint staff meetings for every teacher in the six target schools; the second and fourth were only for representatives from these schools. They were aimed at the improvement of pupil language skills through regular classroom instruction.

In addition 40 teachers participated in evening class in personal speech improvement. These classes met once a week for ten weeks. Of the five sections, one was devoted solely to voice improvement. Teachers enrolled in the remaining four sections sought to generally improve their oral language.

Small group instruction for 75 pupils in kindergarten, grade 3 and grade 6 began on April 26. Groups met for twenty minute periods three times weekly, for a period of four weeks. This instruction was intended to serve as a trial for the work to be done during the following project year.

Evaluation Procedures and Results

The evaluation of this project is based on recordings of pupil speech made on a pre-post basis.

Objective 1. To Determine the Nature of the Extent to Which Substandard Speech is Used in Selected Disadvantaged Schools. Determination of the extent of substandard speech is a difficult problem since criteria vary widely. However, sufficient evidence was gathered from recordings and classroom evaluation to confirm the contention of the speech improvement team that the speech patterns of the children varies markedly from the speech used by the community-at large. In this connection it is interesting to note that on the Teacher Survey, administered in all target schools in June as part of the overall evaluation of the Education Act program, "Intelligibility of pupil speech" was rated third lowest of 48 items.

Objective 2. Institute Programs Designed to Remediate the Substandard Speech Patterns of the Children, Teachers and Parents. This objective was largely procedural. As indicated inthe project narrative, direct small group instruction was given to 75 pupils in the target schools for a period of four weeks, with three twenty-minute lessons being given each week. In addition, four workshops for the classroom teacher were presented with the intention of improving children's speech patterns through in-service teacher training. A program of personal speech improvement for teachers was initiated. Forty teachers were enrolled in the course which met on ten successive Thursday evenings, in five separate sections. A speech improvement program designed for the interested parents was not initiated because of lack of project staff.

Objective 3. To Evaluate the Effectiveness of the Remedial Speech Program. Evaluation of the effectiveness of the speech improvement program for pupils was prepared on pre- and post-tape recordings of pupils who were classified in one of the four groups (treatments).

Group 1. These children were enrolled in the six selected primary target schools and received direct help in small group instruction. They were instructed in 12 lessons of twenty minutes each, three per week for four weeks. A total of 63 pupils in grades K, 3 and 6 had been tape recorded both before and after the small group instructions.

Group 2. These children, also enrolled in the six selected primary target schools, did not receive the small group instructions. The teachers of these children completed the personal speech improvement course for teachers.

Group 3. These children also were enrolled in the six selected primary target schools. The only possible benefits these children may have received relative to speech improvement is that their teachers were participants in the four in-service training sessions conducted for the staffs of the primary target schools.

Group 4. The children in this group were enrolled in primary target schools other than the six that were selected to receive the speech improvement project. Neither the pupils nor their teachers were involved in any sort of speech remediation. This group may be viewed as a control group.

The pupils involved in this evaluation were selected after the fact, i.e., they were not placed in treatment groups at random. From a study of the four treatment groups above one can see readily that improvement was expected to be greatest in Group 1, followed by Group 2, Group 3, and finally Group 4, who received no special remediation. Pupils in kindergarten, grade 3 and grade 6 were included in each group in order to determine whether the treatments would be uniformly effective regardless of grade and level. This factor was built into the design answering the important question of whether such remediation should focus on the younger child or the older child, or whether, indeed, it makes a difference.

Two minute tape recordings of the pupils' voices were made both before and after the project. One part of the tape recording consisted of children naming twenty picture cards. The names consisted of sounds and sound blends which were thought to be difficult for these youngsters. The second part of the tape recording consisted of presenting each pupil with a picture from a multi-ethnic first grade text which younger pupils were asked to tell what they saw and older ones were asked to make a story up about the picture.

For each child the pre- and post-recordings were put on the opposite sides of the same tape. At the end of the project period, three teachers of speech therapy were asked to act as judges. Their task was to rate the pupils' speech on a five-point scale based on five factors: intelligibility; accent, voice and melody; omissions, substitutions, and additions; syntax, vocabulary and usage; and enunciation. The criterion score was the median rating of the three judges. Judges were not told which side was the pre or post recording.

The differences between the criterion scores of pre- and post-recordings were calculated and used as the basis for a two-way analysis of a variance of treatments by grade. In none of the five analyses was there a significant difference in either treatment effect or grade level. There was a slight tendency for judges to rate the post-recordings higher than the pre-recordings, indicating in their judgment that slight improvement had been made. This slight improvement, however, was seen equally in all four treatment groups as well as for pupils in kindergarten, grade 3 and grade 6. These ratings, then, give no evidence that the speech of pupils involved in the Speech Improvement project improved more than that of the control pupils.

Another task of the judges was to indicate which side of the tape represented the better quality of speech. Assuming that pupils' speech would generally improve from pre- to post-recordings, one would expect the judges typically to choose the post recording as having higher quality. Thus, if two or three of the judges selected side A, this was considered the judges' identification of the post recording.

Table 27. Percentage of Correct of Judge's Identification of Post Tapes

	T^1		T^2		T^3		T^4	
	%	(N)	%	(N)	%	(N)	%	(N)
Kindergarten	62.5	(24)	*	(*)	59.1	(22)	80.9	(21)
Grade 3	73.9	(23)	77.3	(22)	86.7	(15)	84.2	(19)
Grade 6	75.0	(16)	65.0	(20)	79.2	(24)	76.2	(21)
TOTAL	79.5	(63)	71.15	(42)	75.0	(61)	80.4	(61)

*There were no subjects in this group as no kindergarten teachers enrolled in the personal speech improvement program.

Table 27 shows the percentage of pupils in each grade and treatment whose post-recordings were correctly identified in this way. If pupils had neither improved nor deteriorated in their speech, one would expect the identifications to be correct 50 per cent of the time by chance. Although each percentage exceeds this, the differences among grades and treatments show no signficance by chi square test. Thus, the judgments for pupils in the T^1, T^2, and T^3 groups were no more accurate than those for T^4 control pupils. In fact, the total percentage correct for the control group is slightly higher than for the other three groups, although this difference is not statistically significant. It should be remembered that pupils were selected for the T^1 group because their speech patterns were most in need of remediation.

ELEMENTARY SUMMER SCHOOL

Introduction

Target school pupils served by the Elementary Remediation and Enrichment project received a considerable amount of direct services in the last months of the 1965-66 school year. Providing a summer school program for children from disadvantaged backgrounds deals with the problem on two fronts. First, it provides remediation and enrichment activities on a more individualized basis than is usually available in the regular school year. Second, it combats the "summer loss" in achievement that is more pronounced among pupils from disadvantaged backgrounds.[1]

Objectives. The objectives of the Elementary Remediation and Enrichment Summer School are as follows:

1. Provide more individual help for pupils with special problems than is now possible in the classes in the regular school year.
2. Provide a program designed to help pupils strengthen the reading, arithmetic, language, and study skills and to stimulate within each pupil a desire for improvement.
3. Deepen insights and extend interests of pupils through broad experiences and an enriched environment.
4. Develop skills necessary for pupils to work more effectively in the regular school program.

Project Narrative. The project provided pupils in grades one through four with help in the improvement of reading, language development, oral and written expression, arithmetic as well as enrichment activities and field trips (164 classes) and remedial reading (29 classes). For pupils of grades five and six the project provided remedial instruction in reading (20 classes) and arithmetic (13 classes); instruction in the basic skills for sixth grade pupils (10 classes); enrichment experiences in science and social studies (12 classes). An enrichment program in art, music, and physical education was provided for all pupils in grades five and six. Field trips were planned and extensive use of the rich resources of the city of Cincinnati and the area closely surrounding the city was a part of the program. The project also included psychological, visiting teacher, and librarian services. All classes began June 20 and lasted for six weeks for four hours per day.

Evaluation Procedures and Results

In the introduction of this report, reference was made to the importance of summer school programs of enrichment and remediation in combating academic "summer loss" and the cumulative academic deficit of disadvantaged children. To determine the effectiveness of the program in a single summer school session is difficult. To be sure, the academic skills in reading and arithmetic can be measured and analyzed for gains, but the lasting effects of the enrichment activities, and whether the obtained academic skills are maintained, can only be determined by longitudinal study. The first three objectives are procedural. They implicitly assume that their fulfillment will result in pupil behavioral changes toward desirable but unspecified goals. The fourth objective treats changes in the academic skills of pupils. The various components of the project each have their particular thrusts; however, in general, they contain the purpose of improved reading, language, or arithmetic skill. Measurement of various academic skills was made in May, 1966 and again at the end of the summer school session in July. The former was used as the baseline measure against which to compare July (end of session) achievement.

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[1] Hetzel, Suzanne and Jacobs, James, "A Comparison of Achievement Gains of Advantaged and Disadvantaged Pupils Through the Summer Months," Journal of Instructional Research and Program Development, Cincinnati Public Schools, October, 1965, Vol. 1, #1, pp. 19-29.

Objective 1. Provide More Individual Help for Pupils with Special Problems Than Is Now Possible in the Classes in the Regular School Year. The provisions made to meet this objective were to reduce the number of pupils per teacher and to provide other aid to further individualize instruction. Teacher aides were used extensively in the project and supportive psychological services and visiting teacher services gave further aid to children. The assumption is made, of course, that these provisions will indeed help pupils with "special problems." Since these special problems are of an unspecified nature, one must simply believe that these provisions have intrinsic worth. Class size was reduced by 24% under that in the regular school year and supportive personnel were increased by about 66%.

Objective 2. Provide a Program Designed to Help Pupils Strengthen the Reading, Arithmetic, Language, and Study Skills and to Stimulate Within Each Pupil a Desire for Improvement. Evaluation of pupil changes in academic skills will be discussed in objective 4. The goal "...to stimulate within each pupil a desire for improvement," was measured by comparing retention rates of fifth and sixth graders in this project and those enrolled in similar components in the regular summer school program in 1965. The percentages of pupils completing the various summer school components were about the same for the two years. Considering the more highly selective nature of 1965 population over the 1966 (ESEA) population, similar retention rates may be viewed as favorable finding.

Objective 3. Deepen Insights and Extend Interests of Pupils Through Broad Experiences and an Enriched Environment. Extensive enrichment activities were carried out by each summer school center. There were 393 classroom excursions of 32 types taken by the 164 classes in grades 1-4.

Objective 4. Develop Skills Necessary for Pupils to Work More Effectively in the Regular School Program. Standardized achievement pre-testing was completed in late May on all pupils in the target schools except sixth graders who were tested in February. Post-testing was accomplished during the last week of summer school which began June 20 and ended six weeks later. Two basic questions were posed in the data analysis. First, was there a significant gain from pre-test to post-test? Second, how does the summer gain compare to that normally achieved in an equivalent six week period during the regular school year? Results from all second and third graders were used in the analysis whereas random stratified samples of 50 pupils each were taken from the fourth grade and from the special sections of fifth grade pupils attending Talent Development, Skills Basic, Remedial Reading, and Remedial Arithmetic classes. Each sample contained an equal number of pupils in each classroom. The raw score pre- and post-test means for second, third, and fourth grade pupils, all of whom attended self-contained classes, are shown in Table 28. Ten of the twelve statistical tests showed a significant difference from pre-test to post-test. Only the arithmetic computation and the arithmetic concepts subtests given in grade 4 showed no significant gain. The largest gains seem to have occurred in the general area of reading rather than arithmetic. This probably reflects the greater emphasis on reading in these grades as compared to arithmetic.

Table 28. Summary of Standardized Achievement Test Results Obtained from Second, Third, and Fourth Grade Pupils Attending Self-Contained Summer School Classes for a Period of Six Weeks.

	N	Pre-Test Mean	Post-Test Mean	Mean Difference	Difference Significant?*	Months of Gain**
Grade 2						
Metropolitan Primary I, Form A						
Word Knowledge	754	27.39	28.96	1.57	Yes	2
Word Discrimination	745	26.71	27.63	.92	Yes	1
Reading	739	28.86	31.34	2.48	Yes	2
Grade 3						
Stanford Primary II, Form X						
Word Meaning	685	15.39	16.80	1.41	Yes	1
Paragraph Meaning	680	24.77	26.82	2.05	Yes	1
Arithmetic Computation	677	24.59	25.23	.64	Yes	1
Arithmetic Concepts	660	16.49	17.47	.98	Yes	1
Grade 4						
Stanford Intermediate, Form X						
Word Meaning	50	9.36	10.98	1.62	Yes	3
Paragraph Meaning	50	17.22	18.52	1.19	Yes	1
Arithmetic Computation	50	12.64	12.84	.20	No	0
Arithmetic Concepts	50	9.14	8.82	-.32	No	0
Arithmetic Application	50	9.86	10.90	1.04	Yes	1

*Difference tested at 5% risk level with one-tailed t-test.
**These estimates are rounded to nearest whole number.

Fifth and sixth grade pupils attending summer school did so by enrolling in programs which had particular emphases. Random samples of 50 pupils in each of the four components were selected equally from each class in operation. Results of the pre- and post-test were analyzed in a manner similar to that used for the second, third, and fourth grade results. A summary of these results is shown in Table 29.

Table 29. Summary of Stanford Achievement Test Results, Intermediate II, Form X, for Fifth Grade Pupils in Various Summer School Components.

SUMMER SCHOOL COMPONENT Stanford Subtest	N	Pre-Test Raw Score Mean	Post-Test Raw Score Mean	Mean Difference	Difference Significant?	Months of Gain
REMEDIAL READING						
Word Meaning	50	11.30	16.05	4.75	Yes	8
Paragraph Meaning	50	16.94	17.94	1.00	Yes	1
REMEDIAL ARITHMETIC						
Arithmetic Computation	50	9.18	11.90	2.72	Yes	6
Arithmetic Concepts	50	7.08	7.92	.84	Yes	3
Arithmetic Application	50	10.26	10.88	.62	Yes	2
TALENT DEVELOPMENT						
Arithmetic Computation	26	11.85	14.08	2.23	Yes	4
Arithmetic Concepts	26	10.42	11.85	1.43	Yes	4
Arithmetic Application	26	15.08	16.12	1.04	Yes	2
Word Meaning	40	20.08	23.55	3.47	Yes	7
Paragraph Meaning	40	28.60	32.20	3.60	Yes	4
Science	50	26.70	27.30	.60	No	0
Social Studies	50	32.07	33.02	.95	Yes	1
SKILLS BASIC						
Spelling	50	23.50	27.56	4.06	Yes	5
Language	50	68.66	68.40	-.26	No	0

The subtests reported under each component in Table 29 represent the particular area of emphasis appropriate to that program. Thus, it is on these subtests that the greatest amount of growth is to be expected. In general, it is seen that mean scores on the post-test were significantly higher than those on the pre-test. Of the twelve comparisons, only two showed non-significant differences, one in science under Talent Development and the second in language under the Skills Basic component. The lack of significant increase in science may be partially due to the content validity of the test. Further, the areas of emphasis in the Talent Development program are very broad and include arithmetic, reading, science, and social studies.

In answer to the two questions initially posed, there is little doubt that pupils in the program made significant gains in the six week period. The gains made in grades 2, 3, and 4 appear to be about what would be expected normally in the regular school year. All subjects in these grades, however, were taught. Gains far surpass normal expectation in grades 5 and 6 where subject specialization occurred. Thus, when classes concentrated on reading, achievement in reading rose significantly.

SECONDARY SUMMER SCHOOL

Introduction

To build upon the gains made in the Secondary Remediation and Enrichment project, an extensive summer school project was inaugurated for secondary level pupils in Cincinnati's primary and secondary target schools. The project offered small group instruction in reading improvement, remedial arithmetic, science, social studies, art, music, junior theatre, junior typing, and pre-college study skills. Except for the pre-college workshop, these classes were open to the seventh, eighth and ninth grade pupils living in the target areas. Teachers, counselors and administrators screened pupils for eligibility on the basis of their abilities and needs. The pre-college workshop was open to twelfth grade pupils who had made definite college plans. The project also encompassed a program of service to actual and potential drop-outs involving intensive counselor and visiting teacher service.

Objectives. The objectives of the Secondary Summer School project are as follows:

1. To raise level of pupil achievement.
2. To inculcate skills of reading, arithmetic and studying.
3. To improve pupil motivation.
4. To build and reinforce interests in art, music, social studies, science and drama.
5. To improve self-image of pupils.

Project Narrative. The project provided junior high school pupils with remedial instruction in reading (8 classes) and arithmetic (18 classes); it also furnished enrichment experiences in science (6 classes), social studies (7 classes), art (2 classes), music (3 classes), junior theatre (1 class), and junior typing (8 classes). A pre-college workshop, housed on the University of Cincinnati campus, was available to 60 graduated seniors who were registered for college for autumn, 1966. All classes began June 20 with junior high sections meeting on alternating days, 8:00 a.m. to 12:00 noon, for six weeks. Pupils in the pre-college workshop attended daily, 8:00 a.m. to 12:00 noon, for seven weeks.

Evaluation Procedures and Results

Achievement test results are a key source of evaluative information for the academic areas. These tests were given on a pre-post project basis. The development of typing skills as measured by a timed writing exercise was the basis for the evaluating Junior Typing, while two questionnaires administered to workshop participants will be discussed in connection with the pre-college sessions. Ratings of pupil participation and attendance given by teachers in the junior high school classes were used as an index of pupil motivation in relation to the third objective. Under this same heading, the services provided to actual and potential drop-outs will be discussed. Other enrichment components of the project, namely art, music and theatre were evaluated on the basis of questionnaires. Unfortunately, little information is available for an appraisal of the effect of the project on pupils' self-image.

Objective 1. To Raise Level of Pupil Achievement. Normally little or no growth would be expected to take place during the summer period of absence from school. In fact, a decline in achievement is more likely. The project attempted to overcome this regression and to continue the progress made in the previous school year. For the four academic areas pupils were tested in their classes at the end of the summer session. The achievement scores of the test covering the area of instruction were compared with those from the same test given at the end of the preceding school year.

Table 30 shows the pre-test and the post-test mean raw scores on the four tests relevant to these instructional areas. Average gains in achievement ranged from 1.73 to 4.95 raw score points. Statistical tests showed that these gains are significant for Paragraph Meaning, Arithmetic and Science. The small increase in Social Studies is not significant at the .05 level. This appears to be a worthwhile benefit in contrast to the decline that normally occurs over the summer months for disadvantaged pupils. In fact, the achievement gain is considerably greater than that suggested by test norms as the expectation for a few months of instruction. The gain in the Paragraph Meaning average raw score, for example, represents an achievement gain of about six months in grade placement scores.

Table 30. Comparison of Mean Pre-Post Raw Scores on the Advanced Stanford Battery of Pupils in Junior High Summer Classes.

	(N)	Pre-Test	Post-Test	Diff.	$S.E._{Diff.}$	t
Para. Meaning	(54)	18.93	21.91	2.98	.621	4.80*
Arithmetic	(121)	28.54	30.79	2.25	.608	3.70*
Social Studies	(48)	36.79	38.52	1.73	1.149	1.51
Science	(46)	26.48	31.43	4.95	.927	5.34*

*Significant at the .01 level.

Objective 2. To Inculcate Skills of Reading, Arithmetic and Studying. Acquiring skills may be viewed as a necessary foundation for increased achievement. Since achievement gains in reading and arithmetic have already been noted, one need only assume that higher test performance reflects the application of improved skills to establish the project's success in achieving the second objective. A typing test given to pupils in junior typing indicated that the average pupil progressed from no typing skill at all to being able to type accurately about 15 words a minute.

For graduating seniors who had been accepted for college admission in the fall, the project offered a workshop in reading and study skills. Participating students (N=23) were asked to complete a self-rating scale at the beginning of the workshop and again at the end. Rating themselves on a five-point scale concerning 18 reading and study skills before and after the workshop, participants gave a mean pre-test rating of 2.89 and a mean post-test rating of 3.04. This increase is not statistically significant. Only two of the 18 items show significant gains: "I understand and remember what I read" and "I can find the main idea in poems." The latter are probably due to chance.

Objective 3. To Improve Pupil Motivation. Ratings on the motivation of pupils are not available on a pre-post basis. Teachers in the summer school project, did however, rate pupils on their participation and attendance, instead of giving traditional marks. Each pupil was rated either Excellent, Good or Poor on both aspects of performance. Taking all pupils and classes as a whole, teachers rated 85% of their pupils either "good" or"excellent" in terms of both their participation and attendance. The attempt to give service to out-of-school youth and to potential drop-outs in target school areas resulted in the identification of 1310 young people. Each was sent a letter announcing the services offered by the project. Subsequent personal contact was made with all but 76 of this group. Working as teams, counselors and visiting teachers provided guidance and counseling service to encourage those who had been referred to return to school in the fall. In some cases, appropriate agency referrals were made for youth who were not likely to profit from further school experience. Some were encouraged to attend part-time classes in continuing education, and others were referred to training classes and community work programs.

The 1310 youngsters contacted consisted of 919 potential and 391 actual drop-outs. By the end of the drop-out effort, 978 of the 1310 had made concrete plans to return to the regular day school program in the fall. An additional 113 planned to attend afternoon or evening adult education classes. A total of 214 referrals were made to such opportunity agencies as the Neighborhood Youth Corps, the Preparation for Employment Program for Special Youth, the Job Corps, and Manpower Development and Training.

Only 17 youngsters were reported as having existing commitments that would make it impossible or inadvisable to participate in some educational or work-training program. Another 54 were already involved in some "positive program" (presumably other than school), which they chose to continue.

Objective 4. To Build and Reinforce Interest in Art, Music, Social Studies, Science, and Drama. This objective pertains to the project components emphasizing enrichment rather than remedial instruction. Classes in each of the areas specified by the objective were offered to target school youngsters in seventh, eighth and ninth grades who seemed likely to profit from such enrichment.

In addition to the evidence offered by achievement test scores concerning the success of these enrichment services, attempts at evaluation were made through questionnaires administered in a number of classes. Pupils were asked to answer questions about the kinds of work they did, what they enjoyed most and what field trips yielded the most benefit. While pupil responses are of interest to the project staffs they are not considered to be of general importance to others, thus they are not reported here.

ELEMENTARY SCHOOL REMEDIATION AND ENRICHMENT

Introduction

This project is aimed particularly at motivating those pupils in primary target elementary schools whose disadvantaged cultural backgrounds have resulted in learning problems. It encompasses a variety of services, all of which are geared to give pupils a more positive concept of themselves, the community and their role in community life. Increased scholastic achievement is the principal educational outcome desired.

Among the services planned to accomplish this goal were: the addition of administrative, secretarial and supportive personnel; cultural activities such as excursions and special assemblies; and supplementary after-school programs. Resource teachers were used to help identify and treat pupils' learning problems. These services were supplemented by other projects that served these primary target children. The Health Services project, for example, was directed toward improving the physical condition of disadvantaged children, while the Parent Education project was aimed at increased parental involvement in their education.

Objectives. The objectives of the Elementary School Remediation and Enrichment project are as follows:

1. Early identification and treatment of individual pupils with learning problems.
2. Opportunity to discover individual pupils' talents and interests that can be a basis for building positive feelings about one's self and one's ability to achieve in school.
3. Achievement in school consistent with the potential of each pupil.
4. Involvement of parents and community in the educational process, making school more meaningful to parents and pupils.

Project Narrative. The Elementary Remediation and Enrichment project for primary target schools began on February 1 and concluded on August 31, 1966. Among the additional personnel employed under the project were 11 administrative aides, responsible to each school principal for supervising, organizing and coordinating project services, both during and after the school day. The 21 resource teachers used in the project worked directly with pupils who had learning problems, were available for group conferences concerning these pupils, or relieved the regular teachers for such conferences. Also added to the staffs of the primary target elementary schools were 10.5 remedial reading teachers. To increase the effectiveness of these professional personnel, 22 resident aides were used to help interpret the school and its educational objectives to the community. One person was employed to coordinate after-school activities in each project school. Finally, in those schools where additional secretarial time was necessary to carry out the project, a part- or full-time secretary was added.

A substantial part of the budget for the Elementary Remediation and Enrichment project was allotted for the purchase of equipment and supplies that would be specially suited to disadvantaged children. Special books and materials for both remediation and enrichment were purchased, with careful attention paid to the cultural content of printed materials. In addition, a number of audio-visual instructional devices were purchased to increase the effectiveness of specialized instruction in project classrooms.

Project services were aimed primarily at those pupils who were most educationally deprived. Pupils with learning problems were identified and placed in small groups. These groups were given special attention by either resource teachers, remedial reading teachers, or both. Non-public school pupils also received remedial instruction at nearby public schools.

Resource teachers and regular classroom teachers made extensive use of excursions to introduce children to the wider community around them and to give them experiences not normally furnished by their homes. Extensive after-school activities also contributed to enriching the background of project children. The principal focus of these activities was on the hobbies and interests of the pupils. Thus, many of them were motivated to participate more actively in the organized program, thereby extending the scope of their interest, developing their natural talents and enhancing the concept they had of themselves.

Evaluation Procedures and Results

Because of the broad range of this project and the related secondary level project in primary target schools, much of the information collected from program evaluation is pertinent here. The procedure for evaluating this project will be to narrow the focus of appraisal to primary target schools only and to relate the findings to specific objectives of the project.

Data that may be used in evaluating the Elementary Enrichment and Remediation project include the following: selected items from the Parent Survey, Teacher Survey, and Student Survey; achievement data collected for grades two through six; promotion rates; and scores on measures of pupil self-image.

Because the project began late in the school year, marked changes in data that may be compared with pre-project findings are not expected at this time. Even when pre-project baseline data are available, the comparison of post-project findings will not be extensive. This report will be more concerned with whether the direction of the program seems to correspond with the needs indicated by the data. At best, one might hope to identify a few needed services or project emphases that do not seem adequately covered by current project organization and plans.

Objective 1. Early identification and treatment of individual pupils with learning problems. Although pupils with learning problems are found in every school, they are likely to be more common in disadvantaged areas than in suburban communities. This probability is confirmed by the Teacher Survey ratings given by primary target elementary teachers on items concerning Motivation of my pupils, The type of pupils I teach, and Previous academic preparation of my pupils. Each of these items was rated much lower by primary target elementary teachers than by elementary teachers in non-target schools.

Other Teacher Survey results provide evidence that primary target elementary staff members felt a strong impact from the remediation and enrichment services provided by the project. A comparison of January and June ratings shows that the four survey items related directly to these services (Provision for academic remediation, Provision for pupil cultural growth, Adequacy of enrichment activities, and Present curriculum for the disadvantaged) increased significantly. Two other items related less directly showed non-significant gains (Provision for emotionally disturbed and Provision for socially maladjusted child). In contrast, in those non-project schools where the survey was administered, the ratings in both January and June on all these items except Provision for emotionally disturbed decreased.

There is some evidence that disadvantaged pupils themselves feel a need for intensified help. On the Student Survey, more primary target elementary pupils than control pupils gave an affirmative answer to the question "Do you need more help from your teacher?" Likewise, more primary target pupils answered yes to the question "Would you like to talk to your teacher more?", but this difference was not statistically significant.

Objective 2. Opportunity to discover individual pupil talents and interests that can be a basis for building positive feelings about one's self and one's ability to achieve in school. A positive self-image is generally considered essential to optimal academic achievement. In the case of disadvantaged pupils, it is commonly believed that a low self-estimate is a characteristic hindrance to higher aspiration and accomplishment. Thus, this project, like most of the other local Education Act efforts, assumes that raising pupil self-concept is a prerequisite to raising pupil achievement.

Teachers who work with project children do, in fact, see the self-concept of these pupils as low. This fact is evidenced by ratings given Pupil image of self and Pupil aspiration level on the June Teacher Survey. Primary target elementary teachers rated both items below the middle of the seven-point scale; the ratings on both were below the mean of all 48 survey items; and, most striking, project teachers' ratings on both items were over a full unit below those of non-target teachers. These June primary target ratings represent a slight increase over the January rating on aspiration level and a similarly insignificant decrease for self-image.

The very limited data available for pre-post comparison, then, show no evidence that pupils' feelings about themselves, as observed by teachers, improved in the first project year. Indeed, noticeable improvement could scarcely be expected in so short a time.

An interesting contrast to these teacher estimates is presented by other pertinent data. Unfortunately, the other approaches to evaluating self-concept permit neither pre-post analysis or comparison with non-project pupils throughout the school system. Rather, in each case, the comparison is with secondary target and "control" groups.

On the Student Survey, pupils themselves were asked four questions relevant to self-concept: "Are you satisfied with report card grades?", "Are you doing better in your school work this year?", "Do you think you will graduate from high school?", "Do you hope to go to college?" In no case is there a significant difference in number of affirmative responses between primary target pupils and others.

The similarity of self-concept between primary target pupils and others of similar background is confirmed by the three instruments used to assess self-concept directly. Although appropriate normative data is not available, the scores of the project children on all instruments were comparable with those of the secondary target and control groups. In all, they give an impression of a relatively favorable self-concept.

What I Am Like tests self-image in physical, psychological, and social contexts through pupil self-ratings on a five-point bi-polar adjective scale. Total mean ratings of primary target elementary pupils (grades 4 through 6) on the ten items in each subtest were above the theoretical mid-point of the scale: physical, 3.94; psychological, 3.90; social, 3.77. Only in the social area were project pupils lower than those in secondary target and control schools, and this difference is not statistically significant.

In primary grades the Attitude Toward Self and School instrument yielded similar results. For each of 18 items the child is asked to blacken the nose of a smiling or a frowning face to show how he feels. For only two items is there a significant difference between the percentages of smiling faces marked by primary target children (those served by this project) and by the non-project group. More project than non-project children marked the smiling face for "When you get your report card and take it home," (92% vs. 83%), and fewer marked the smiling face for "About growing up and getting older," (70% vs. 81%). Again, large percentages of smiling faces suggest a fairly high self-concept, although this must be a tentative conclusion in the absence of normative data.

Children's drawings of a house, a tree and a person were scored on the basis of eight factors identified in the literature on the House-Tree-Person technique. All factors were believed to measure aspects of self-concept. An analysis of variance showed no significant difference in the scores earned by primary target, secondary target and control pupils.

All the above data will serve as a baseline for future evaluation of self-image. After these children have been exposed to Education Act services for a longer time, more reliable conclusions about the effect on their self-concept will be possible.

Objective 3. Achievement in school consistent with the potential of each pupil. If the project is successful in providing adequate remediation and enrichment to pupils with learning problems, this success should ultimately be reflected in higher school achievement. Data collected for program evaluation include direct and indirect assessment of pupil achievement. Since Education Act effects from the brief period of services in the first year were not likely to be measurable, standardized achievement tests were administered only once, to establish baseline data for future comparison. Less direct approaches to measuring achievement include teacher judgments, reflected in promotion rates and results of the Teacher Survey, and responses to the surveys of parents and pupils. Teacher judgments alone permit limited longitudinal comparisons at this time.

Although Teacher Survey ratings of Achievement of pupils are lower in primary target than in secondary target and control elementary schools, the primary target mean rating for this item increased 4.9 per cent from January to June, while secondary target and control ratings were almost identical for the two surveys. This primary target increase was higher than the mean increase for all 44 survey items.

Primary target elementary parents supported this judgment of improved school work, with 92 per cent affirmative response to the question "Is ______ improving in (his or her) school work?" on the Parent Survey. This percentage was exceeded by only three other items. Pupils reacted less strongly, with 75 per cent affirmative response to a similar question; this item ranked in the bottom half of the 20 items on the Student Survey.

Teacher judgments of pupil achievement are also reflected in promotion rates. Cincinnati's "Policy on Classification of Elementary School Pupils" (Revised, 1965) specifies: "Primary factors in classification are age, rate of learning, and achievement." This emphasis places the achievement criterion in relation to other promotion standards (secondary factors are also specified), and suggests that learning ability must be appraised along with achievement. This is consistent with the project objective in question.

Table 31 compares primary target promotion rates with those of all other elementary schools for the period from 1960-61 to 1964-65 and for 1965-66. These data show a consistent pattern of lower rates in primary target schools. The smallest differences appear in the grades where the highest percentages of pupils are promoted. In this regard it should be noted that Cincinnati's promotion policy strongly discourages repetition of kindergarten, of two successive grades, or of a total of more than two years in elementary school.

Table 31. Comparison of Primary Target and Non-Primary Target Elementary School Promotion Rates by Grade and Year.

GRADE	Average Per Cent Promoted From 1960-61 to 1964-65			Per Cent Promoted From 1965-66		
	Non-PT Schools	PT Schools	Diff.	Non-PT Schools	PT Schools	Diff.
6	98.5%	98.6%	+0.1	99.6%	98.5%	-1.1
5	96.4	96.6	+0.2	97.8	97.4	-0.4
4	95.1	94.3	-0.8	96.6	94.8	-1.8
3	96.3	94.4	-1.9	97.5	93.8	-3.7
2	94.3	93.5	-0.8	96.1	94.2	-1.9
1	86.6	81.7	-4.9	90.4	80.2	-10.2
K	99.9	99.8	-0.1	99.8	99.9	+0.1
Weighted Average All Grades	95.1	93.3	-1.8	96.4	93.3	-3.1

In grades one through six the lower primary target rates are more pronounced for 1965-66 than for the preceding period. These differences, however, tend to be small and seem to be a function of the general rise in non-primary-target school promotion. When primary target rates for the first project year are compared with those of the baseline period, there is almost no difference.

A more direct approach to determining whether pupils' achievement matches their potential is through standardized tests. It is important to realize, however, that tests of general intelligence or scholastic aptitude are themselves tests of achievement since their scores depend on the extent to which one's intellectual ability has been developed through learning. Thus, comparing "mental ability" with school achievement is really comparing one type of achievement with another, similar kind.

A full description of the achievement test results is shown in the Pupil Achievement section of Part I, Program Evaluation. Attempts were made to compare expected achievement, based on scholastic aptitude, with actual achievement. The determination of expected achievement was, however, too tenuous to arrive at valid conclusions.

Objective 4. Involvement of parents and community in the educational process, making school more meaningful to parents and pupils. The Enrichment and Remediation project sought to increase the involvement of both parents and community in the education of primary target school pupils. This involvement was promoted through the use of resident aides in making home contacts and conducting study-discussion group sessions. Community involvement was promoted through enrichment activities, especially after-school trips and excursions.

The need for such emphasis in the services of the project is reflected in the ratings given on the Teacher Survey to items concerning parent and community involvement. Three items concerning parent involvement, participation and support were rated 25 per cent lower by primary target than by all non-target elementary teachers in the June survey. There is evidence, however, that the situation got better from January to June. The ratings are as follows:

Concept Rated by PT Teachers	January Rating	June Rating	Diff.
Parent Involvement	2.94	3.23	+.29
Parent Participation in School	2.74	2.93	+.19
Supportive Attitude of Parents	3.70	3.71	+.01

Similarly, teacher ratings of Field trip opportunities increased from January (4.47) to June (5.82), a total increase of 1.35. This indication of improvement may be checked by an examination of the results of the Parent Survey and the Student Survey. More parents of primary target children than of secondary target and control youngsters said they were encouraged to participate in school (84% vs. 81%) and were active in school (42% vs. 32%). On the Student Survey, however, primary target pupils answered items on parent involvement about the same as secondary target and control pupils. Slightly more pupils said someone at home had talked to their teacher (81% vs. 79%), that they got praise at home for good schoolwork (82% vs. 80%), and that they talked about their future career at home (86% vs. 85%). Only on the item Do you talk about school at home was the percentage of affirmative response smaller in primary target schools (79% vs. 84%). Concerning community involvement through field trips, primary target pupils were also slightly more affirmative in their responses: Do you enjoy field trips (98% vs. 95%); Do field trips help you in schoolwork (77% vs. 73%).

In addition to suggesting project success in achieving community involvement, the percentages on these two field trip items seem to have another implication. About a fifth of the pupils who acknowledge that field trips are pleasant fail to see any academic benefit resulting from them. This is true in both project and non-project schools.

SECONDARY SCHOOL REMEDIATION AND ENRICHMENT

Introduction

By the time the disadvantaged pupil reaches the secondary school age, the culturally based obstacles to learning that have not been adequately dealt with have been compounded in number and complexity. As these individuals pass the age limit of compulsory school attendance, their lack of success and interest in the school very often causes them to terminate their education. The loss to the person and to society is tragic.

To relieve this problem, this project sought to aid 2379 disadvantaged secondary pupils in the one senior high attendance area designated as a primary target area. The attempt to increase these pupils' chances of academic success included five main areas of service: remedial help, individual and small group instruction, intensified pupil-personnel services, curricular enrichment, and welfare.

Objectives. The objectives of the Secondary School Remediation and Enrichment project are as follows:

1. To raise the level of pupil achievement.
2. To improve attendance.
3. To reduce dropout rate.
4. To improve pupil-motivation.
5. To improve self-image of pupils.

Project Narrative. To provide the services indicated above the staffs of the project schools were supplemented with additional personnel. Six administrative aides were added to take charge of implementing this project. Four resource teachers were assigned, one each in the areas of English, mathematics, social studies and science. These teachers helped the 15 specially assigned teachers in their remedial work with small groups of pupils. As a means of intensifying the personal services provided for these pupils, two counselors and two visiting teachers were employed. Nine resident aides and nine clerk-typists were also hired to provide important non-professional service.

The pupils most in need of remedial help in one or more areas of instruction were placed in groups of not more than fifteen pupils each. These groups, taught by the remedial personnel hired for the project, were paired with remedial sections taught by regular staff members.

The four resource teachers helped the remedial teachers locate appropriate materials, plan classroom activities, and arrange for field trips or other culturally enriching activities. Most of the field trips were closely related to class work so that they would supplement the instruction and stimulate interest. Other excursions were cultural in nature to give pupils new types of experiences.

Many pupils in the project were in need of financial assistance to stay in school. For some of these, clothing was purchased, while others were furnished a hot lunch daily. Such school supplies as pencils, pens, notebooks, gym shoes or gym suits were bought when pupils could not supply them. Bus fare, supplied through the Health services project, was available for pupils to keep clinic or dental appointments.

The senior high project counselor worked closely with potential drop-outs and with those seniors who would find it difficult to get jobs after graduation.

The junior-high counselor and the two visiting teachers provided general guidance and adjustment services.

Evaluation Procedures and Results

In the evaluation of the Education Act program much information was collected that is pertinent here. The procedure for evaluating this project will be to narrow the focus to the secondary level primary target schools only and to relate the findings to specific project objectives. Data used in evaluating this project include the following: selected items from the Teacher Survey, Student Survey, and Parent Survey; achievement test data collected for grades seven through eleven; promotion, attendance and drop-out rates; and self-image data.

Objectives 1. To Raise the Level of Pupil Achievement. Nearly all the remedial and enrichment services of this project are directed principally to raising the achievement level of disadvantaged pupils. It must be realized, however, that gains in pupil achievement are normally accomplished slowly, so that it is not likely that any appreciable differences would appear in the achievement of pupils after only five months of Education Act services. To establish a baseline, however, all project pupils were tested with the Stanford Achievement Tests in May, 1966. The results of these tests are shown in Table 1 and 2.

Interpretations of these scores should be tempered by two factors. First, the norms on the Stanford Achievement Tests are demanding because the norming population was considerably above national average with respect to scholastic aptitude (Otis I.Q. median 106-109). Secondly, theESEA evaluation required a large volume of testing to be performed in a short period of time and the conditions under which these achievement tests were taken were not believed to be conductive to optimal performance. Teachers and administrators reported that pupils seemed weary of testing, and this condition probably kept them from doing as well as they might have if the test sessions had been spaced over a longer period of time.

Table 32 shows the grade scores of project pupils in grades 7, 8 and 9. Since the tests were administered in May, the grade norm is the grade level plus 9 months.

Table 32. Summary of Stanford Achievement Grade Scores for Primary Target Secondary Schools by Grade, Subtest, and Quartile Points.

Subtest		Grade Level								
		7			8			9		
	Quartiles:	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3	Q_1	Q_2	Q_3
Paragraph Meaning		4.3	5.2	6.1	5.0	6.0	7.1	5.4	6.4	7.7
Spelling		4.7	6.1	7.4	5.2	6.7	7.7	6.2	7.7	9.4
Language		4.0	4.8	5.8	4.6	5.4	6.6	4.9	5.8	7.2
Arithmetic Computation		4.5	5.4	6.2	5.1	5.8	7.5	5.7	6.6	8.2
Arithmetic Concepts		5.2	6.0	6.8	5.6	6.5	7.7	6.2	7.1	8.1
Arithmetic Applications		5.3	6.0	7.0	5.6	6.5	7.7	6.0	7.2	7.9
Social Studies		4.8	5.5	6.4	5.2	6.2	7.2	5.8	6.7	7.8
Science		4.6	5.2	5.9	5.0	5.8	6.9	5.4	6.4	8.1
Battery Mid-Score		4.7	5.5	6.3	5.2	6.1	7.3	5.8	6.7	8.0

The median battery mid-scores for grades 7, 8 and 9 are seen in Table 32 as 5.5, 6.1, and 6.7, respectively. The deviations of these mid-scores from their respective norms are -24 months, -28 months and -32 months, for grades 7, 8, and 9, respectively. The deviations from norm increase each year by four months, reflecting a wider range from norm.

The subtest showing the highest grade score achievement in all three grades is spelling, while the lowest subtest achievement in all three grades is language. (These observations were also true in the elementary grades.) Rote learning methods are typically used in teaching spelling. One might speculate that spelling is taught often because it is subject to rote learning, simple evaluation and pupil feedback, and subject to controlled classroom management. These factors may account for this relatively high achievement. The relatively low achievement in language is one of the most typical characteristics of disadvantaged children. To teach language in such a way as to be meaningful in the life space of these children is most difficult. Further, deficits in language are very conspicuous when these children enter school.

The test results for the (one) primary target senior high school are shown in Table 33. The Stanford High School battery reports T-score norms, not grade scores. While the battery administered included an English subtest, those results are not reported because of errors in scoring the test. Twelfth grade students were not tested because of their already heavy test schedules and because their graduation will prevent follow-up.

Table 33. Summary of Stanford High School Battery Achievement Tests Results (Standard Scores) for Primary Target Senior High School Students by Grade, Subtest and Quartile Points.

Grade Level Quartile	Reading	Numerical Competence	Mathematics Part "A"	Battery Mid-Score
Grade 10				
Q_1	36*	35	39	36
Q_2	41	41	45	41
Q_3	46	46	49	46
Grade 11				
Q_1	38	35	38	38
Q_2	43	41	44	43
Q_3	48	46	50	48

*These are standard scores (T-scores) with a mean of 50 and a standard deviation of 10.

A T-score of 40 (one standard deviation below the mean) is equivalent to the 16th percentile, while 45 is equivalent to the 30th percentile. Thus, the median achievement on the three subtests is between the 16th and 30th percentiles. This achievement exceeds that of earlier grades and probably reflects a selection factor due to school drop-out of the lowest achievers.

A few items of information do afford some indirect indications of the effect of the project on pupil achievement. Teacher Survey ratings, responses to surveys of parents and pupils, and pupil promotion rates may be examined for this purpose.

Comparing primary target teachers' ratings on the item "Achievement of pupils" in January and June provides an index to appraise change. These January and June ratings may be further compared with those of secondary target and control teachers to offset the possibility that differences were an effect of time of year rather than of actual perception of change. Primary target secondary teachers rated the achievement of pupils 11.6 per cent higher in June than in January. The ratings of secondary target and control teachers, on the other hand, decreased in June: the secondary target rating by .9 per cent and the control of 10.6 per cent.

Teachers, then, evidently saw some indication of increased achievement among the primary target pupils. There is some evidence that parents also felt that their children were achieving at a higher level. On the Parent Survey, 99 per cent of the parents of primary target, secondary level pupils reported that their children were improving in their school work. This percentage of affirmative response ranks this item well above the overall mean of 91 per cent on the 14 item questionnaire.

Responses from pupils were considerably less affirmative, with 56 per cent indicating that they were doing better in their school work. This percentage is significantly lower for secondary level primary target pupils than for elementary. It ranks the item in the bottomhalf of the 20 items on the survey.

Available data on pupil promotion permit a comparison of 1965-66 rates in primary target secondary schools with similar data from the preceding five-year period. These data are reported in Table 34.

Table 34.Promotion Rates for Primary Target and Non-Primary Target Secondary Schools Comparing Base Years* with 1965-66 by Grade Level.

	Primary Target Schools			All Non-Primary Target Schools		
Grade	Base Years*	1965-66	Difference	Base Years*	1965-66	Difference
12	91.8%	89.0%	-2.8%	94.0%	93.4%	- .6%
11	91.5	85.8	-5.7	93.5	93.0	- .5
10	87.9	90.4	+2.5	91.0	90.4	- .6
9	88.8	95.7	+6.9	92.0	91.5	- .5
8	88.6	92.8	+4.2	92.3	91.6	- .7
7	88.9	90.7	+ .8	92.1	91.2	- .9
Weight Average All Grades	89.2	91.6	+2.4	92.3	91.7	- .6

*Promotion rates averaged for the five year period 1960-61 to 1964-65.

Comparison of promotion rates in primary target schools during the base years and 1965-66 show an over-all increase from 89.2 per cent to 91.6 per cent--an increase of 2.4 per cent. The highest increases were in grades nine (6.9%) and eight (4.2%). The differences in the various grades are great ranging from -5.7 per cent in the eleventh to +6.9 per cent in the ninth grade. In contrast, similar comparisons within non-target schools show a slight over-all decrease in promotion rate, from 92.3 per cent in the base years to 91.7 per cent in 1965-66, a decrease of .6 per cent. The variation of these differences is very small (in contrast to the primary target schools) ranging from -.6 per cent in grades ten and twelve to +.7 per cent in grade eight.

During the 1965-66 school year, it appears that in general, the promotion rates in primary target schools (91.6%) and non-target schools (91.7%) are about the same, but whereas the former schools increased, the later remained essentially the same (-.6%). It is unlikely, though, that the increases in promotion rates in the primary schools are a result of the Education Act.

Objective 2. To Improve School Attendance. Examination of absence rates in primary target secondary schools shows them to be higher than any others in the city. If pupil absence is excessive, extensive in-school services aimed at remediation and enrichment can hardly be effective. Thus, improved attendance is indeed a necessary objective of the project.

Items on the June Teacher Survey concerned with tardiness and attendance were rated much lower by primary target secondary teachers than by secondary teachers in non-target schools. At the same time, however, these ratings represented a very favorable change over the ratings given in January. The rating for tardiness increased 8.4 per cent and that for attendance 12.9 per cent, suggesting that teachers felt better about both aspects of pupil behavior. The significance of these rating increases is most impressive when compared to other schools. Ratings on these same items by secondary target teachers decreased 3.9 and 2.5 per cent, while those of control teachers decreased 29.2 and 28.1 per cent, respectively.

These comparative ratings suggest that teachers in project schools saw some improvement in pupil attendance patterns. This impression cannot be verified legitimately by comparing the year's attendance records before and after the project started because attendance is known to show much normal variation with time of year. It is possible, however, to consider the rates for the entire school year in relationship to those for the years that preceded. Such a comparison both for primary target schools and all the secondary schools in the city is made in Table 35.

Table 35. Average Daily Absence Rates for Primary Target Secondary Schools Compared with City-Wide Rates by Year.

Year	Primary Target Rates Junior High	Senior High	City-Wide Rates* Junior High	Senior High
1960-61	13.6	9.2	9.0	6.7
1961-62	14.4	9.3	9.2	7.0
1962-63	14.4	9.3	9.5	7.1
1963-64	14.0	10.6	9.6	7.8
1964-65	13.8	11.7	9.4	8.7
1965-66	15.0	11.5	9.9	9.0
Average	14.2	10.3	9.4	7.7

*Includes primary target schools.

The percentages of average daily absence in Table 35 indicate that the trend has been for absence to show a general increase, with junior high school absence consistently exceeding that of senior high. Interestingly, the pattern in primary target schools closely resembles the city-wide pattern, although primary target rates are consistently higher. In 1964-65, for example, both primary target and city-wide absence rates dropped slightly at the junior high level but increased sharply for senior high. The 1965-66 school year shows a continuation of the general trend toward increased absence, but the percentage for the one target senior high school decreased slightly. This small decrease cannot safely be attributed to any particular cause. It may be simply a function of the high rate of the preceding year.

Objective 3. To Reduce the Drop-Out Rate. Keeping pupils in school until they complete a level of education that suits their abilities and aspirations is essential to any program of educational improvement. In Cincinnati the percentage of drop-outs in the disadvantaged neighborhoods has been perennially higher than in suburban areas. A three-year comparison of these rates is shown in Table 36.

Table 36. Percentages of Pupils Dropping Out of Primary Target Schools Compared with Non-Target Schools (September-June) by Grade and Year.

	Primary Target Schools				Non-Target Schools			
Grade	63-64	64-65	65-66	Total	63-64	64-65	65-66	Total
12	6.2	9.1	6.2	7.3	3.8	4.6	4.6	4.4
11	11.0	13.0	13.7	12.5	6.7	7.0	7.7	7.0
10	12.6	16.6	10.7	13.2	7.9	8.6	8.9	8.5
9	9.1	8.9	10.4	9.5	3.9	4.0	5.1	5.5
8.	5.0	5.7	4.9	5.2	2.4	2.0	2.3	2.2
TOTAL	10.0	10.3	8.1	9.4	5.3	5.6	6.0	5.7

These data indicate the percentages of drop-outs in primary target schools over a three-year period as compared with those of non-target schools throughout the city. The percentages are based on the ratio of the number of pupils withdrawn from school during the school year, except for death or transfer, to the total pupil accountability, i.e., end of year membership plus drop-outs. Percentages for the seventh grade, which are usually very low because of compulsory attendance laws, are not reported.

In rates for 1965-66 the primary target rates give rise to optimism. Although non-target drop-out rates have tended to rise slowly over the three years, the primary target rates show an increase in 1965, but drop off in 1966. The net decrease is 2.2 per cent; tenth grade drop-outs are down 5.9 per cent. In a personal communication the counselor of the school expressed the opinion that the reduced drop-out rate was chiefly a function of jobs made available to these students through the Neighborhood Youth Corps.

Objective 4. To Improve Pupil Motivation. As with other items on the Teacher Survey, "Motivation of my pupils" was rated considerably lower by primary target secondary teachers than by secondary teachers in non-target schools, (3.85 and 4.52, respectively). However, this June rating by primary target teachers represents a 4.6 per cent increase over the ratings given by these same teachers in January. Again, this slight increase takes on more importance in view of the fact that the ratings of secondary target and control teachers decreased in June. Teachers, then, seemed to see some increase in the motivation of project pupils.

Objective 5. To Improve Pupil Self-Image. The self-image of disadvantaged pupils is generally regarded as lower than that of the average pupil. Many authorities have expressed the view that it is essential to raise this self-image before one can properly motivate the youth and before he is able to achieve to his maximum potential.

Although project teachers give considerably lower ratings than control teachers to the Teacher Survey item on self-image, their rating in June represented an increase of 5.9 per cent over the January rating. On the other hand, secondary target and control ratings given by primary target, secondary target, and control teachers shows the control ratings higher than primary target, with secondary target ratings the lowest of the three.

This same general pattern appears in the results of the House-Tree-Person test given to pupils in grades 7-9. Scores based on eight factors that are believed to be related to self-image were highest for control schools. Primary target scores were somewhat lower, but again the secondary target scores were lowest of the three groups.

By contrast, the results of the locally constructed What I Am Like instrument show the self-image of primary target pupils to be highest of three groups and that of control pupils, lowest. What I Am Like measures self-image in three contexts: physical, psychological, and social. Pupils rate themselves on a five-point bi-polar adjective scale. In all three areas the ratings of primary target and secondary pupils were above the theoretical mid-point of the scale: physical, 3.88; psychological, 3.86; social, 3.77.

One final source of data related to pupil self-concept is available. On the Student Survey pupils themselves were asked the following four questions: "Are you satisfied with report card grades?", "Are you doing better in your school work this year?", "Do you think you will graduate from high school?" and "Do you hope to go to college?" Only on the last item was there significant difference among primary target, secondary target and control groups. The percentage of affirmative responses to this question was highest for secondary target schools, with primary target and control groups following in the same order.

Just over half (56%) of primary target pupils indicated that they thought their school work had improved. Only 31 per cent, however, said that they were satisfied with their report card grades. For the most part, then, project pupils seem to see themselves as capable of better school work than they are doing. Ninety-four per cent of the responding pupils said they thought they would graduate from high school and 71 per cent indicated they hoped to go to college.

From all this data there emerges a hazy picture of the self-concept of project pupils. The results of the various instruments used to measure self-image seem somewhat contradictory when the project group is compared with other groups in the study. What does seem clear, however, is that the self-image of these pupils tends to be rather favorable, perhaps more so than has been suspected. Unfortunately, this must be a tentative conclusion because normative data (particularly for suburban children) are not available for the instruments used in this appraisal. Only after future measurements have been taken will it be possible to determine the effect of continued project services on pupil self-concept with these data viewed as baseline measurements.

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